THE BUILDER

A JOURNAL FOR THE ARCHITECT AND FOR ALL INTERESTED IN THE CONSTRUCTIVE & DECORATIVE ARTS

VOL. CIII.—No. 3840. NOVEMBER 8, 1912.

ILLUSTRATIONS.

UNIVERSITY COLLEGE, DUBLIN. PROPOSED NEW BUILDINGS.
ACCEPTED DESIGN BY MESSRS. DOOLIN & BUTLER.

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MR. REGINALD BLOMFIELD, A.R.A., F.R.I.B.A., ARCHITECT.

BIRMINGHAM COUNCIL HOUSE EXTENSION:—
VIEWS OF EXTERIOR AND INTERIOR.
MESSRS. H. V. ASHLEY & WINTON NEWMAN, ARCHITECTS.

ILLUSTRATIONS IN TEXT.

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SCHOLARLY ARCHITECTURE.

THE frequent and somewhat indiscriminate use of the word scholarly in architectural criticism is suggestive of questions not without importance in the development of a consistent modern architecture, and in professional education to that end. It is not a mere question of a pedantic purism in terms; the constant use of the word is, with other things, significant of a certain trend of feeling with regard to architecture, common at present both amongst architects and others capable of bringing a cultivated appreciation to the criticism of their work. To say that it is clearly an academic term indicative of an academic phase of architecture may be true, but it is not enough, for unfortunately the word academic also is ordinarily used in a loose, indeterminate sort of way, suggestive of what appears to some as a highly desirable state of architectural art, and to others, whose opinions are equally worthy of consideration, as the very reverse.

It might be said that any high degree of attainment in the varied knowledge necessary to the modern architect competent to deal successfully with all branches of professional work in itself amounts to scholarship; but we must use words in their ordinary sense. In that sense it applies to distinguished learning, literary—especially in the ancient or classical literatures—historical, archæological. Scholarship is one thing, art is another, and architecture is art. The profession contains men for whom, without doubt, the qualification scholarly has a sound and well-deserved application: men who are scholars as well as artists capable of producing good architecture. But it is an open question how far their work owes its high quality to their scholarship or to something else. As the handmaiden of art, scholarship may render excellent service; yet it would not be difficult to instance buildings of high merit that come short of the highest, as architecture, by reason in part of this very scholarship.

Without in any way detracting from whatever of real suggestive value for architecture such words as scholarly and academic may contain, their want of appropriateness as critical terms of a creative executive art is perhaps more clearly felt in their application to other arts. Take a few instances at random: The "Ode to the West Wind"; the "Ode to a Grecian Urn"; "Abt Vogler"; a sonnet of Wordsworth or of Michel-angelo; the works of Shakespeare, or even of Milton; and beyond mere irrelevance is there not even a faint sense of derogation in saying of either, or of the poet's work in general, that it is scholarly? The same is also true of the painter's art, and in a painting of Botticelli or Raphael, of Turner or Watts, or Millais, it is not scholarliness we appraise or that appeals, however it may be implicit. We might, as high praise, call Lessing's critical treatise on the Laocoön scholarly, but who would use it of that famous group itself? Returning now to architecture, would it not be mere pedantry to say of the masterpieces of Athens and her colonies or of the great Mediæval period that they were scholarly? We do not call the men who thus could build scholars, but masters. These were the great original styles, in that, after the universal law of creative life, they were evolved from what went before them by a long series of natural and logical changes, and the introduction of new elements

true to the threefold expression of structure, purpose, and of the soul of the peoples who made them. Works of art they were in the noblest and truest sense of that sadly-abused word, but not of scholarship in our present sense of that term.

But with the Renaissance we come to something essentially different. That great spontaneous resurgence of joyous vitality and energy in all departments of human life did not arise in the conscious application of definite guiding principles. No academic rules could contain or confine it. Its animating spirit of criticism, emancipation, and individualism, unexhausted and indeterminate even now, was fraught with many inconsistencies and contradictions.

In the land of its birth its passion for beauty and art, its enthusiasm for learning, especially for the ancient literatures of Rome and Athens, were naturally linked with a revived interest in their archæological remains. In architecture this showed itself in two ways: first, in a revulsion of feeling against the long neglect and reckless destruction of the ruins of Imperial Rome, their use as quarries and the burning of their statuary for lime; and secondly, in the study and adaptation of the antique styles to their modern buildings; and from this time the motive spirit in architecture was changed, it became imitative in a way it had never been before. If the change was more swift and complete in Italy than elsewhere it was also more natural, in being the revival of a native style that long ago had been developed in the same geographical and climatic, and, if not in the same social, political, and religious, at all events in the same racial conditions. Its broad defect as architecture, shared with humanism, its contemporary scholarship, was that grace and beauty were aimed at independently of character, that the thing to be expressed, the structure, the purpose, the emancipated modern spirit became of less importance than that the manner of expressing it should be a correct imitation of the antique. The counter reflection may be noted that even so architecture was but expressing what was taking place as the result of the movement in religion, politics, philosophy, science, the extravagance of reactions, and the spirit of experiment and adventure in all things.

Yet even in Italy it is interesting, *à propos* of our subject, to note how the adaptation of the antique architecture to their modern uses was carried out from the first in two quite different spirits with divergent aims and results. The works of Filippo Brunelleschi and Leon Battista Alberti, two of the most distinguished of the earlier architects of the movement, may be compared in illustration of this. Both studied the antique with enthusiasm and patient carefulness, and both applied what they learned in their after work: the first applied the main principles and copied the details of Roman construction and architecture, adapting them with originality and freedom, according to his own ideas in solving the modern problems he was faced with. But Alberti had in his buildings and details far more scholarly regard for the precedent of his Roman models; and, beautiful though his works are, he laid the foundation of that school in which architecture appears to aim at abstract beauty with a freedom of expression detached from construction and fitness for purpose, and applies the classic orders and details as ornament even where they can have no structural meaning. Alberti may be said to have been the first of the scholarly architects. A distinguished humanist—*i.e.*, a scholar as we still understand the term, he was, beyond that, one of the most versatile and many-sided men of an age prolific of such, with distinguished natural gifts and attainments ranging from music and poetry over a wide field to mathematics and mechanics. A writer on many subjects, his great book on "Building" was the first of a series of great works such as those by Vignola and Palladio and others, which, based upon an assumption that the absolute canons of architectural art had been revealed to Athens once and for all, have had so powerful an influence—such is the inconsistence of the Renaissance—in subjecting architecture to academic rules and formulas, encouraging the fatal idea that all that is required in the architect is an artistic faculty to copy and adapt from recognised original types and standards.

Our modern schools may be free from the pedantic extravagances of the later Renaissance Academies, but they share with the latter the common error of ignoring the true limitations of architectural art, of aiming at beauty detached from the proper character of the subject dealt with, and of assuming that architectural beauty has reached its zenith for all time in the classic styles. They produce men who are certainly often accomplished artists, exhibiting a wonderful beauty and facility of draughtsmanship, gifted with a fancy prolific, versatile, and scholarly, within the limits of a memory stored and trained in all the accomplishments of classic art; but less distinguished for that broader creative imagination which, trained not only in the principles and forms of the great architecture of the past, but also in all the science and industry and requirements of the present, is thus able not only to deal originally and characteristically with its special problems, but to foresee and prepare for future possibilities.

Evolution, as is recognised in Biology, is not necessarily progressive. While in Italy the Renaissance was a return, more or less, to the purity of an ancient native style, to the more Northern nations in which, as especially in France and England, the Romanesque—itself derived from the Roman as that had been from the Greek—had passed up by a long process of orderly and logical development into the pure style so wrongly named Gothic, the Renaissance came at first simply as a new element and influence gradually assimilated, but proving later, and especially through the publication of the writings and drawings of Palladio and others, to be a transition and reversion to the classical type.

It would appear that, as men's minds became more and more occupied with the immense and ultimately beneficent advance of the physical and mechanical sciences and of their utilitarian applications, itself one of the deeper results of the Renaissance, they lost the instinct and faculty for creative art. They looked to knowledge and scholarship of the ancients to supply them with consistent modern architecture. The antique and Renaissance authors were searched, new books and measured drawings were published and studied with the idea that the old styles, that owed their greatness, as architecture, to the fact that they so perfectly expressed the life of their own time and place, could be fitted upon a civilisation quite different and without precedent in history, that architecture can, in fact, be studied, understood, or developed apart from the rest of contemporary life.

We do not think we express unfairly the limitations of and the danger of futility that is implicit in academic and scholarly architecture.

The words, however, undoubtedly do also imply a purpose that is both desirable and quite practicable.

The architecture of the future will be, in a broad sense, academic in that it will be subject to certain clear principles, universally recognised, but which are not as yet completely formulated nor accepted. It will be scholarly in a living progressive sense, expressing both practical efficiency and character. For anything like a complete realisation of such a consistency in the architecture of the past, of the ideal aimed at by the terms we discuss, we must go back to what is the chief source of all subsequent Western architecture. We must go back to the antique Greek, not by any means assuming it to be the best possible, a pattern to be copied literally; not because, as is so often said in justification of the prevailing classic fashion, our present life is more like that of old Greek or Roman than to that of our mediæval ancestors, for indeed its ruling ideas—religious, social, political, industrial, scientific, etc.—are very different from all these; but simply that we may, if possible, realise the causes of that complete unity of Greek life, its perfect correspondence with and expression in their art.

Scholarly we may say their architecture certainly was, but with a scholarship showing little of that concern with past cultures which forms so large a part of ours, and much more with their own actual busy competitive life. It was a living progressive scholarship, a knowledge of life in all its living aspects, which, combined with high instinct and faculty for fitness and beauty, found expression in the most perfect sensual and intellectual art yet achieved. Compared with those of Roman, mediæval, and modern times, their buildings were but simple structures; but their simplicity was an epitome of practical precision of line and form, logically worked out in every detail with the utmost subtlety of æsthetic refinements. It was in complete unity with, an exact expression of Greek life whose atmosphere of keen emulation and competition and breezy public criticism in all arts and activities tended to the highest efficiency and the most complete development of personalities. This it is which gives it such value for us, and not as so many have, perhaps pardonably, assumed, that the intrinsic beauty of its forms justifies the use of a Greek temple as a model indifferently for church, town hall, summer-house, etc., or

of a Greek column in all or every position to which it can be applied in use or ornament.

To repeat what we said at the outset, we do not discuss these terms in a captious or pedantic spirit, but, as we think, solely in the twin interests of clear literary and critical English and of art.

The old Greek language, itself as beautiful and perfect an instrument of expression as any created by their artistic genius, gave us our title architect. There also we find ancestors both of "scholar" and of "art"; of the first suggesting the leisure and quiet breathing, that was yet far from idleness, of the groves of the Academia, or later in the traceried cloisters of monastery and university; of the second more suggestive of the busier activities of the life of towns and the country outside; the arranging, contriving, preparing, and fitting together.

Of great and enduring value is the gift of Athens to the world! In the slow westward progress of our race her name descended from a Sanskrit ancestor, which survives to-day less altered in form, more like in sound, and identical in meaning in our word dawn:—

> "'Let there be light!' said Liberty.
> And, like sunrise from the sea,
> Athens arose!"

She was one of the cities of the dawn. But, while we bear in mind the freshness and beauties of the dawn, should we not look forward with confidence, and work for the full noonday which is yet to be?

NOTES.

The Temple Church. CERTAIN works of restoration have recently been carried out at the Temple Church, and the usual pæan of praise has gone up from the daily Press voicing the ideas of that large section of the public which likes to see its old buildings made as good as new. The parts affected appear to have undergone a very drastic process of renovation, and how far this was necessary for their preservation is certainly questionable. The turret, for instance, which stands at the junction of the rotunda with the choir on the north side, has been entirely refaced, if not rebuilt, and the southern of the two free-standing piers which carry the porch is now, including its capitals, a mere replica of what stood there before. The northern one appears to have been renovated at an earlier but still recent date, and the same stone has not been used in both cases. The beautiful Transitional doorway, which the porch shelters, with its receding orders of variously enriched shafts and archivolts, has been thoroughly tidied up. Before the work began, this elaborate feature had all the appearance of ancient stonework long subjected to the influences of the London atmosphere. Its surface was crumbling in places and soot-laden, white on the exposed faces and black in the hollows. It was supposed that it was in danger of perishing altogether, and it was thoroughly cleaned. In the course of this process the curious discovery was made that the whole surface had at some unknown period been thickly coated with an alien substance. This has been for the most part removed by the application of a chemical preparation, and the stone now appears in its original colour, except for the places where the black substance has refused to part company with it. The doorway now looks new, but spotty, and has lost all its agreeable bloom of age. The beauty of the carved ornament, which is of extraordinary refinement for its period, was appreciable before, while the lack of the broken portions which have now in some cases been replaced was not noticed. In one point, however, there is distinct gain. The quaint realistic little half-length figures of monks and royalty which crown the enriched members of the jambs and shelter under the spreading capitals of the intervening shafts are now more clearly discernible and attest the humorous outlook and remarkable technical accomplishment of the unknown XIIth-century sculptor whose work they are.

Lift Fatalities. ON Monday, the 28th ult., an inquest was held by Dr. Waldo, the City Coroner, upon the death of a clerk who was killed by falling down a lift well. The verdict was "Accidental death," but Dr. Waldo, in mentioning that this was the forty-ninth case of this kind during his experience of eleven and a half years as Coroner, expressed the view that many of these deaths were preventable. In the case under consideration the well was protected by collapsible gates, and two of the five attendants who alone were authorised to work the lift stated that the lift could not be moved if a single gate happened to be open. It was also against the rules to use this lift for passenger service. But it appeared that the deceased had opened the gate with a lift key in his own possession and had, in the darkness, stepped into the well, believing that he was stepping into the lift. A similar recent case was mentioned by the Coroner, in which a barmaid opened a lift gate with a hairpin and was killed by falling down the well. A considerable proportion of the lift fatalities coming before the Coroner are due to falling down the lift wells, and in many cases the "accidents" arise from such tampering with safety gear as is above mentioned. The difficulty of protecting people of certain classes against themselves is very great. Workmen will clean running shafting and put belts on to revolving pulleys by hand at the imminent risk of death, although their employers may put up conspicuous warnings against such recklessness and may also provide proper and safe means of doing the work. We cannot help feeling that "accidental death" is scarcely an accurate way of describing such incidents as we refer to. It is eminently desirable that lifts should be, whenever possible, arranged with gates that can only be opened when the cage is at rest at the level of the particular gate operated, but at the same time we think it should be made an offence punishable by fine or otherwise to tamper with gate locks or in any similar way to contravene rules made by owners of lifts to prevent injury to persons. Many people are in the habit of expecting to be looked after in these matters like children, and it would seem desirable, in addition to taking all reasonable mechanical precautions, to endeavour also to instil some sense of responsibility into people who from ignorance or carelessness, or both, are only too often a danger to others as well as to themselves.

The Fatal Fire at Kensington. THE disastrous fire at Messrs. John Barker & Co.'s premises on the 3rd inst., when four young women were killed and several others injured (one of whom is since dead), has again shown that even with carefully considered means of escape some risk often remains. The external iron staircase was not used, as the girls were cut off from it before they knew their danger, and the modern fire appliances in the building were also not brought into play. Happily this was the occasion of another demonstration of the promptness and efficiency of our Fire Brigade, and it seems certain that all the dead women but one would be alive now had they not jumped to the ground from the cornice 60 ft. above. In doing this one missed the jumping sheet and struck the pavement directly, and two others most unfortunately jumped simultaneously, and therefore, though they fell into the sheet, the impact of the two bodies together was too violent to be safely met. We see with regret that a member of the Brigade, Fireman A. G. Ayres, had to be taken to hospital suffering from severe burns to face and hands after most gallantly saving one of the women.

Flood Protection in Paris. UP to the present nearly a million sterling has been expended in making good the damage caused by the disastrous floods of January, 1910, but very little has been done in the way of works for the prevention of floods and the protection of the city. The scheme which has been agreed upon by the Paris Municipal Council and the French Government includes the general raising of quays and parapets along the Seine within the city boundaries, the widening of the river at the Monnaie, and the deepening of the river between Suresnes and Bougival in order to facilitate the passage of flood waters. After these works have been executed the river will be dredged between Paris and Rouen as a further aid to the flow of water. It is satisfactory to learn that the two authorities concerned are about to vote the sum of nearly two and a half millions on account of the first instalment of the works, the execution of which ought to be no longer delayed in view of the serious risks to which the city is exposed in its present unprotected state.

Richmond Bridge. THE Richmond Council have applied for the imposition of a five-mile speed limit for heavy motor traffic over the bridge, and we learn that there will be an inquiry by the Local Government Board in respect of the application. We fear, however, that any such method of dealing with the present difficulty

will be of very doubtful value. As we pointed out in our issue of July 26, the bridge owes its situation entirely to the interests of a few people of a century ago, and the present generation is paying for the errors of those preceding it. Lest, therefore, we leave a similar debt, it would be well for the Council to face the facts squarely and to seek for some lasting solution of the difficulty. In our opinion the only really satisfactory way is the construction of another bridge and the widening of the lane at the foot of George-street. This would avoid the existing dangerous corners and the awkward series of varying gradients which are responsible for the present state of affairs. In any case, to do any lasting good a considerable sum of money must be expended, and the Council, realising this, would be wise to seek the best means of doing so to obtain a satisfactory return in the shape of a fitting continuation of one of the highways of Greater London.

Reinforced Concrete and the L.G.B.

A LONG-STANDING grievance of reinforced concrete specialists against the conservative action of the Local Government Board is once again being ventilated, this time by correspondence in the *Times Engineering Supplement*. Although in some isolated cases the Board have allowed terms of twenty and thirty years for the repayment of loans in respect of works to be executed in reinforced concrete, their general policy is restrictive, and has the effect of imposing a needless obstacle in the way of an important and perfectly reliable branch of architectural construction. Some time ago Mr. John Burns was urged by a deputation to remove the embargo placed by his Department upon reinforced concrete, but after consultation with his professional staff decided against such a course. The fact is that some of the engineering inspectors of the Board still retain the prejudice formerly felt by many British engineers against a comparatively new structural method. Prejudice of the same kind has now virtually disappeared. The Institution of Civil Engineers, who declined to appoint representatives on the R.I.B.A. Committee because the Council thought that such action would imply the support of the Institution to an "untried" method of construction, have long ago changed their attitude, and it is to be hoped that the old-fashioned engineers who seem to control the policy of the Local Government Board will not be allowed to continue a course of action that is not only unfair to an important branch of industry, but is in many instances opposed to the public interest.

The New President of the Institute.

THE R.I.B.A. session opened on Monday evening last with an address by the new President, Mr. Reginald Blomfield, M.A.Oxon., A.R.A., F.S.A., F.R.I.B.A. As was to be expected, the address took the form of an able and well-reasoned exposition of principles affecting the policy and well-being of the profession, but dealing primarily with the position of the Institute, the position of the architect, Registration, and last, but by no means least, with education. The address is printed *in extenso* elsewhere in our columns, and will be read by all with interest and welcomed for the ideals it fosters. Mr. Blomfield was elected A.R.A. in 1904 and Professor of Architecture shortly afterwards. He is Chairman of the Board of Architectural Education, R.I.B.A., and, as a representative of the Institute, is a member of Council of the new British School at Rome. Our issue of July 28, last year, contains an illustrated article upon his chief architectural and literary works, while a review of his latest book will be found in this issue. Of his most recent designs we may mention the Carnegie Free Library, Lincoln, to which we devote a Plate this week. Mr. Blomfield has more than once acted as assessor in important competitions, and he is on the Committee appointed to consider the question of the rebuilding of the Regent's Quadrant.

ARCHITECTURAL DRAWINGS AT THE ROYAL INSTITUTE OF BRITISH ARCHITECTS.

THE opening meeting at the Royal Institute of British Architects on Monday evening provided occasion for an exhibition of drawings from the Institute collection. The occasion was, however, altogether too brief for the purpose, as the time allowed for viewing the drawings after Mr. Blomfield's speech was scarcely sufficient for more than a glance at the subjects on the walls, which had to be removed immediately subsequent to the meeting, as the gallery was required for other purposes.

The exhibition in question was not formed from a vicarious selection of the Institute's considerable collection of original drawings—it represented an individual and independent collection, only second in interest to the Burlington-Devonshire group of drawings in the possession of the Institute. Regarded from the point of view of architectural draughtsmanship and not architectural history, they possess even a greater variety of interest. Like the Burlington-Devonshire collection, the drawings had been gathered together by a distinguished amateur collector, in this case, Sir James Drummond Stewart, of Grandtully, Dunkeld, who died shortly after their presentation in 1838. The President read a letter from Sir Charles Barry to Professor Donaldson, in which he makes the presentation, on behalf of the Scottish baronet, of certain of the drawings to the Institute, and refers to earlier gifts from the same hand. Until recently the drawings were pasted in a folio album, which no doubt formed part of the original gift, to which those received later were added and attached after the same manner. This inference is borne out by the fact that several pages of the album carried drawings pasted on each side of the sheet, not precisely an ideal way of preserving them, but which no doubt seemed to the librarian of that day as the best method of providing for their security and for retaining the unity of the collection, and, as it happens, they have survived the ordeal remarkably well.

The collection, therefore, on view on Monday night forms one of the earliest gifts to the Institute after its foundation, and one of the most interesting in its history so far as its collections in this respect are concerned. The album, however, provided neither adequate means for the inspection or for the proper verification of the drawings. It has, therefore, been thought well to have them detached and placed in sunk mounts, and they appeared in their new dress for the first time at the inaugural meeting. The collection consists altogether of 119 examples, which are largely the work of Italian and French masters of the late XVIIth or early XVIIIth century, representing names of the first importance so far as architectural draughtsmanship is concerned, if not so far as architecture itself is concerned. Many of the drawings are signed, and are of undoubted authenticity. There are others whose authorship can be placed by connoisseurs beyond any reasonable doubt; there are a few of conjectural attribution, and there are still others—not the least interesting part of the collection—to which as yet no artist's name has been assigned. In the course of time no doubt the authorship of all the drawings will be indentified or approximately identified. The President of the Institute has published several of them in his recent book, and has cleared up some doubtful points. But their individual character makes, perhaps, subsequent verification only a matter of intelligent interest and time.

Sir Charles Barry, in the letter already referred to, alludes to [illegible] drawings as being the work of Bibiena and others, and certainly those by Giuseppe Galli da Bibiena (there are also two drawings by his father, Francesca Galli) form the largest number of drawings by one artist in the collection. The scope of the Bibiena talent suggests in a measure the general artistic atmosphere, both from the point of view of draughtsmanship and architecture, of the collection as a whole. There are, of course, some exceptions. Many of the drawings, apart from those by Giuseppe Galli, were designed for the scenic purposes of the theatre, elaborated with something of the delight in the problems of perspective which was characteristic of the Bibiena family, or, if they deal with the invention of architectural subjects for other purposes than the theatre, the style employed is that of the rococo. The numerous members of the Bibiena family devoted themselves with remarkable consistency to the same artistic tradition, and their influence extended outside their own country. It might not be uninteresting to attempt to trace the extent of this influence (chiefly perhaps that of Giuseppe) on the development of the rococo style in the various centres which they visited for the exercise of their artistic and decorative skill in the production of theatrical scenery or in the arrangement of spectacles for Court festivals, or even at times in actual building. Architecture and the stage were more nearly allied in those days than they are now. It is recorded that Brunelleschi provided the scenery for a masque; Palladio's setting in the theatre at Vicenza still remains, and many other instances could be cited. The Bibiena drawings are of undoubted authenticity. So are those of Panini, of which a few bear his signature, the two drawings of his pupil, Jean Nicholas Servandoni, and the four by Mauro Tesi.

Other examples by Italian artists of the late XVIIth or early XVIIIth century remain unidentified; among these we should be inclined to include the drawing of a candelabrum attributed to Cellini. Next in importance to the drawings of the Italian school are those of the French artists. The sketch of the decorated prows for barges, ascribed to Nicholas Poussin, requires further verification. But there can be no doubt about the veracity of the pen-and-ink drawing signed by Puget, or of the scene of an interior by Delafosse, which is characteristic of the somewhat wild compositions of this famous ornamentist. A pen-and-ink drawing for the decoration of the return angle of a ceiling is ascribed to Le Brun, and certainly its bold design and turbulent grouping suggests his manner, although it was probably not the final working out of his composition. Oppenordt, a French architect, and of the same period as Le Brun, who studied for some years in

Rome, is represented by a vigorous pen drawing of a fountain, with rococo architectural features, figures, vases, etc., in the manner of architectural arrangement then coming into vogue. A restrained and carefully-elaborated design of a public building, by Henri Marlet, is of considerably later date (the drawing is evidently wrought for the purposes of engraving), and, according to its inscription, "Remporté le prix à l'Académie de Peinture, Sculpture et d'Architecture de Dijon, en 1784," Paul Decker's florid interior of a hall provides an example of German draughtsmanship (the artist was born at Nuremberg in 1677); while Isaac Moucheron (who was of the same period as Decker), in two charming pen-and-ink drawings, represents with Cornelius Schut, an earlier artist, said to be a pupil of Rubens, the art of drawing of *les pays bas*. Not the least interesting series of the collection is a set of tiny vignettes depicted with a light and sure touch, and with a charming feeling for composition.

For the first time, probably, since its presentation by Sir Charles Barry, a President of the Institute has associated the donor with the collection which will no doubt in future be definitely connected with his name. Sir James Drummond Stewart's taste and predilections as a collector are sufficiently indicated by his choice of subject, and we have no doubt that the desire which he expressed through Sir Charles Barry, that the new possessors of the drawings should have as great a care for them as he would himself, will be fulfilled to the letter.

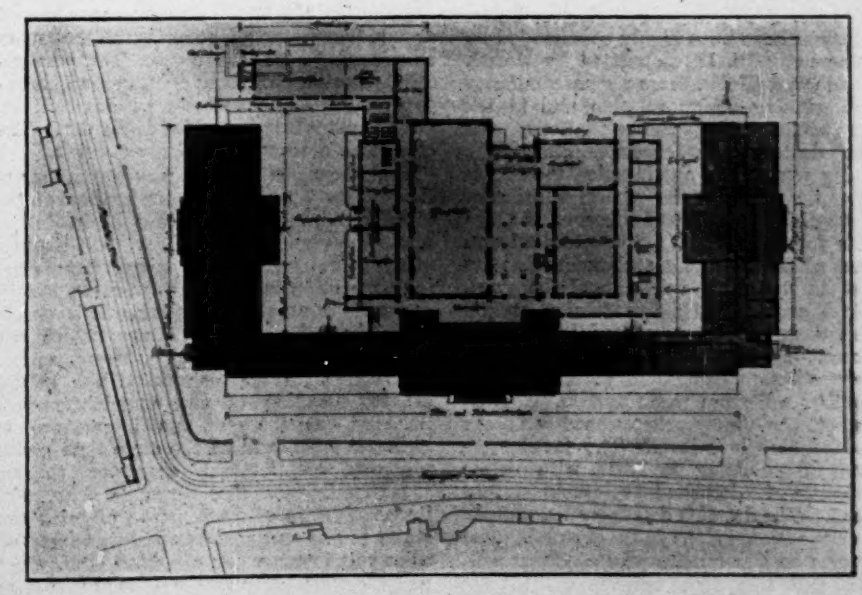
UNIVERSITY COLLEGE BUILDINGS, DUBLIN.

THE designs submitted in competition for the proposed new Dublin College, to be erected in connexion with the National University, are, on the whole, of a high standard, the planning being perhaps more uniformly successful than the elevations. This result is no doubt partly due to the character and restricted area of the site and the carefully-detailed conditions published by the governing body, which tended respectively towards the evolution of plans on set lines, and prevented serious errors of judgment in the allocation of the rooms and sections. It must not be understood, however, that the problem before the competitors was an easy one. The sections for which provision had to be made were scheduled in the conditions as:—Administration; students' general accommodation; arts; physics, chemistry, physiology, and pathology; heating apparatus; examination-hall, library, large theatre, and seven rooms; anatomy, biology, geology, and architecture; public health, materia medica, and miscellaneous; the required total floor area of which amounts to well over 100,000 sq. ft. About one-third of this accommodation, embracing the fifth and a large proportion of the seventh sections, is not for the present to be erected, the existing buildings on the site being utilised until funds are available for the completion of the scheme. This condition, while it was not permitted to weigh with the assessor in considering the plans on their general merits, must necessarily have hampered the competitors in their work. The site was, as already stated, exceedingly restricted in area, being quadrilateral in shape, with a frontage of 500 ft. to Earlsfort-terrace, on the east, and of 250 ft. to Hatch-street, on the south. The possibilities of future building on the northern and western boundaries necessitated a considerable recession on these sides to obtain uninterrupted light and air, while a further setting back of the street frontages was desirable to gain entrance forecourts and to reduce the inconveniences arising from the traffic. The cost of the entire scheme is fixed at 160,000*l*., excluding fittings, furniture, and equipment, and of this inadequate sum 95,000*l*. is to be expended on the first portion. These serious limitations are to be regretted in a project for collegiate buildings, destined to be a centre for national education, and also one of the few examples of early XXth-century architecture which Dublin is likely to possess.

A design submitted by Messrs. Doolin & Butler (No. 10), of which firm Mr. R. M. Butler, F.R.I.B.A., is the surviving partner, has been placed first by the assessor, Mr. H. T. Hare, F.R.I.B.A. Recognising doubtless the difficulties to be faced in providing one large central quadrangle, a method adopted by many competitors, the author of this design has grouped his buildings around two courtyards, each of which will be about half an acre in extent. The simplicity of the lay-out is immediately descernible from the axial arrangement of the plans. The main entrance is situated in the centre of the Earlsfort-terrace wing, which is devoted to arts and administration. From this entrance access is obtained to a large central hall, with staircases on either side, and from the western side of the hall one enters the examination-hall, which, with the library to the north and the lecture theatre to the south, forms the division between the two quadrangles, and is the central feature of the plan. The corridors on either side of the examination-hall afford the necessary exits, and also give direct communication between the eastern and western wings. The northern wing is devoted to chemistry and physics, the southern wing to anatomy, physiology, and kindred subjects, while in the rear, or western, block accommodation is found for those sections, for which provision is for the present to be postponed. This arrangement allows the whole of the main enclosing frontages to be at once proceeded with, forming three sides of a rectangle, within which a large proportion of the existing buildings will be retained. When the scheme is being completed the operations will be entirely shielded from public view. The winning plan alone embodies this disposition, which has much to be said in its favour. The entrances for male and female students are situated at the ends of the Earlsfort-terrace wing, with cloak-rooms and conveniences on the ground floor and on the basement respectively, while the common dining-room, with the necessary kitchen and offices, are also situated in the basement. The anatomical section is somewhat awkwardly placed on the ground floor, where the absence of roof light will prove inconvenient. The position of the mortuary and the heating chamber, the latter being placed in the worst position possible on the plan in point of view of the prevailing winds, leave much to be desired. The entrance-hall and parts of the main corridors are rather deficient in light. With these exceptions the plans fulfil the main requirements of grouping and lighting, while the absence of a basement, except in the eastern wing, is a satisfactory feature of the design. The author has, moreover, set back his buildings some 40 ft. from the western boundary—a safeguard which no other competitor has fully managed to achieve. The elevations to the public thoroughfares are strikingly simple. The order adopted only appears fully developed in the colonnade forming the central feature, with slightly projecting wings surmounted by twin pediments, and in the treatment of the angle pavilions, which contain subsidiary staircases. The remainder of the façades, two stories in height, with main cornice and attic story over, is of plain ashlar, the ground-floor windows alone being accentuated. This conception results in a dignified, well-proportioned, and comparatively inexpensive elevation, in keeping with that XVIIIth-century style of architecture which is traditional in Dublin, and escaping the museum or municipal building-like appearance noticeable in some of the other competitors' work. The central feature over the main entrance is not an integral part of design, and opinions may differ as to its necessity. Economy has dominated all else in the treatment of the elevations to the courtyards, which are being finished in strictly utilitarian manner in cement. The author doubtless regrets this necessity as keenly as will any critic.

There is no question that, of all the schemes submitted, Mr. Butler's is the one which can be carried out with the closest approximation to the funds available, and that he has achieved this without prejudice to the directness and roominess of the plan and the dignity of the design. His appointment as architect by the governing body has been officially announced, and his sense of gratification at his success can but be enhanced by the general appreciation of the fairness of the award which is expressed by his professional brethren in Dublin.

The assessor has placed second a design (No. 3) by Messrs. Arthur & H. H. Hill, of Cork, which, while not so compact in plan as the winning design, has much to commend it. The two-court principle is adopted, a main quadrangle some 208 ft. by 144 ft. and a smaller medical court, around which are situated accommodation for the sciences cognate to surgery and medicine, a segregation which is one of the salient features of the plan. The allocation of the various sections is satisfactory, although a more reposeful situation might have been found for the library, which is placed in the Earlsfort-terrace wing directly over the main entrance. A feature has been made of the



Proposed University College, Dublin: Block Plan.

Design placed first, by Messrs. Doolin & Butler.

examination-hall by placing it in the centre of the northern wing, and effectively treating the elevation abutting on the large quadrangle. With the exception of a few chambers in the basement, and the attic stories over the dominant features of the design, the accommodation is confined to two floors, which greatly extends and elaborates the plan. The elevations to Hatch-street and Earlsfort-terrace are typically Neo-Greek, the entrance portico, with its Ionic columnar treatment, losing something in refinement by exaggerations of the style and a wealth of ornament which, in hard Irish limestone, would be costly to execute. The façades are flanked by pavilions, impressive mainly by their heaviness. Wings two stories in height are advanced 40 ft. to the pavement line on the south front to form an entrance courtyard. The façades to the quadrangles were intended to be treated with bricks 2 in. in thickness and dressings of cut stone, of which the effect, by its simplicity, would doubtless be very pleasing. A raised terrace with stone balustrade is shown around the main quadrangle, adding much to the dignity of the building, but the expense would be prohibitive, a factor which has been rather neglected elsewhere in this design.

Mr. T. J. Cullen, M.R.I.A.I., a young Dublin architect, whose design has been placed third, adopted the basic principle of one large quadrangle, entered from Earlsfort-terrace by a triple archway for vehicular traffic. The entrance to the administration block, which is also the main entrance to the buildings, is situated on the side of the quadrangle most remote from the street, while the somewhat meagre entrances for the students are also from this courtyard. The result is that some seclusion is obtained appropriate to collegiate conditions.

Unfortunately this principle on the confined site involves either wings two rooms in depth and an ill-lit central corridor, or a four-story building. The author has chosen the latter plan, and placed one-fourth of the total accommodation, including some laboratories in the basement, 12 ft. below street level. With this grave exception, the plans possess considerable merits, the corridors, entrance-hall, and the rooms generally being adequately lighted and conveniently planned, particularly in regard to the physics section. The position of the assembly, or examination, hall, with its longer side on the Hatch-street façade, enables the latter to be effectively treated. The elevation to Earlsfort-terrace is rather impaired by the elaborate central feature which, with an Ionic colonnade, defines the main entrance. The additional story over this entrance tends further to destroy the harmony of the whole conception.

Although no official announcements have been made, it is generally understood that two designs have been highly commended by the assessor. No. 12, submitted by Messrs. O'Callaghan & Webb, bears a great similarity to the winning design in plan and in the broad treatment of the elevations, and highly deserves its commendation. The grouping around two quadrangles, the allocations of the sections, the central position of the examination-hall and library, the entrances for the students, the situation and amount of the basement accommodation are almost, in the narrowest sense of the word, identical, except that the anatomical section in this design is better placed for lighting purposes. The elevation to Earlsfort-terrace is very effective, the main entrance being marked by a Roman Doric portico, with the bases of the finely-proportioned columns placed at first-floor level. The façade terminates in projecting pavilions, with distyle treatment of detached columns deeply recessed. The detail is decidedly Neo-Greek, and elaboration is [illegible] enough. The elevations to the quadrangles are [illegible] in scale, and this fact, combined with the general internal and external design, may have militated against the success of this scheme on the score of expense. Architecturally, it is probably one of the finest conceptions submitted.

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MISSOURI STATE CAPITOL COMPETITION.

JEFFERSON CITY, the Capitol of Missouri, is located on the Missouri River between St. Louis and Kansas City, and the site of the new Capitol lies on a promontory visible for miles up and down the river and 100 ft. above its level.

A domed building with one axis on the main street of the city was called for, but the orientation was left to the competitor. The winning design, by Messrs. Tracy & Swartwout, architects, of New York City, takes the long axis of the building parallel to the river and fulfils the requirements of the programme in a thoroughly practical manner. In describing his plan, Mr. Swartwout emphasised three elements: (1) Complete circuit of offices on the outside; (2) uninterrupted circulation; (3) the relation of Senate and House and the vestibule and library. Furthermore, "the secondary stairs and elevators are in the four corners of the building, just off the circulation, and so placed that members of the Legislature can go from either side directly to their coatrooms without passing through the lobbies."

A feature of the design not found in other State Capitols is the splendid opening up of the plan and section from the entrance portico and steps through a high vaulted stair hall to the dome.

We may mention that other buildings by the same firm include the Post Office, Denver, Colorado; Connecticut Savings Bank, New Haven, Conn.; Yale University Club Building, New York City; Home Club Building, New York City; Metropolitan Bank, Washington D.C. We are indebted to our contemporary, the *American Architect*, for permission to reproduce the winning design, which we shall further illustrate next week.

HOUSING SCHEME, CHELMSFORD.

As the first instalment of their extensive scheme the Town Council have just completed the erection of thirty-eight workmen's dwellings. The Corporation bought the site of 6 acres at 275*l.* per acre, and will build 140 cottages, with gardens, to be let at rents of 6*s.*, 5*s.*, and 4*s.*, according to the accommodation. The thirty-eight now built are of red brick with tiled roofs; they cost 5,310*l.*, and the rents amount to 455*l.* per annum; there were ninety-six applicants for the first two that were built.

RE-INAUGURATION OF THE CHAPEL OF THE ORDER OF THE BATH.

Mr. Lionel Earle, C.B., C.M.G., the newly-appointed Secretary to H.M.S. Office of Works, is nominated as a member of a committee [illegible] arranging for an investiture [illegible] Henry VII.'s Chapel, Westminster Abbey, in the autumn of next year. It is proposed to revive, as far as modern conditions will allow, the connexion of the Order of the Bath with the chapel wherein the last installation of Knights of the Order was held in June, 1812.

OPENING MEETING OF SESSION AND PRESIDENTIAL ADDRESS.

THE first general meeting (ordinary) of session 1912-13 of the Royal Institute of British Architects was held on Monday, at No. 9, Conduit-street, W., the President, Mr. Reginald Blomfield, A.R.A., presiding.

The minutes of the last meeting having been taken as read, and the announcement that the Council had admitted the Hampshire and Isle of Wight Association of Architects to alliance having been made,

The President delivered the following address:—

"It has become the custom of this Institute to look to its Presidential addresses for announcements on matters of serious interest to the profession, for the foreshadowings of policy, sometimes for sanguine anticipations of ideals that we should all like to see realised. You will recollect the frankness of my predecessor in this chair, and the zeal with which he attacked the difficult problems which confronted him during his term of office. Many circumstances combined to make his tenure of office more than usually full of arduous situations. I who have the honour to succeed him do not look for a series of alarums and excursions. Rather, so far as I can see, the time has come for a steady consideration of our position and for a period of serious, if less brilliant, development on practicable lines. I hope I shall not disappoint you if I say that I have no heroic policy to offer you, no infallible panacea for the many difficulties that lie before us; but I shall ask you to follow me in the suggestions which I shall put before you as to the present position, and to help me on your part with your clear, unprejudiced, and close attention.

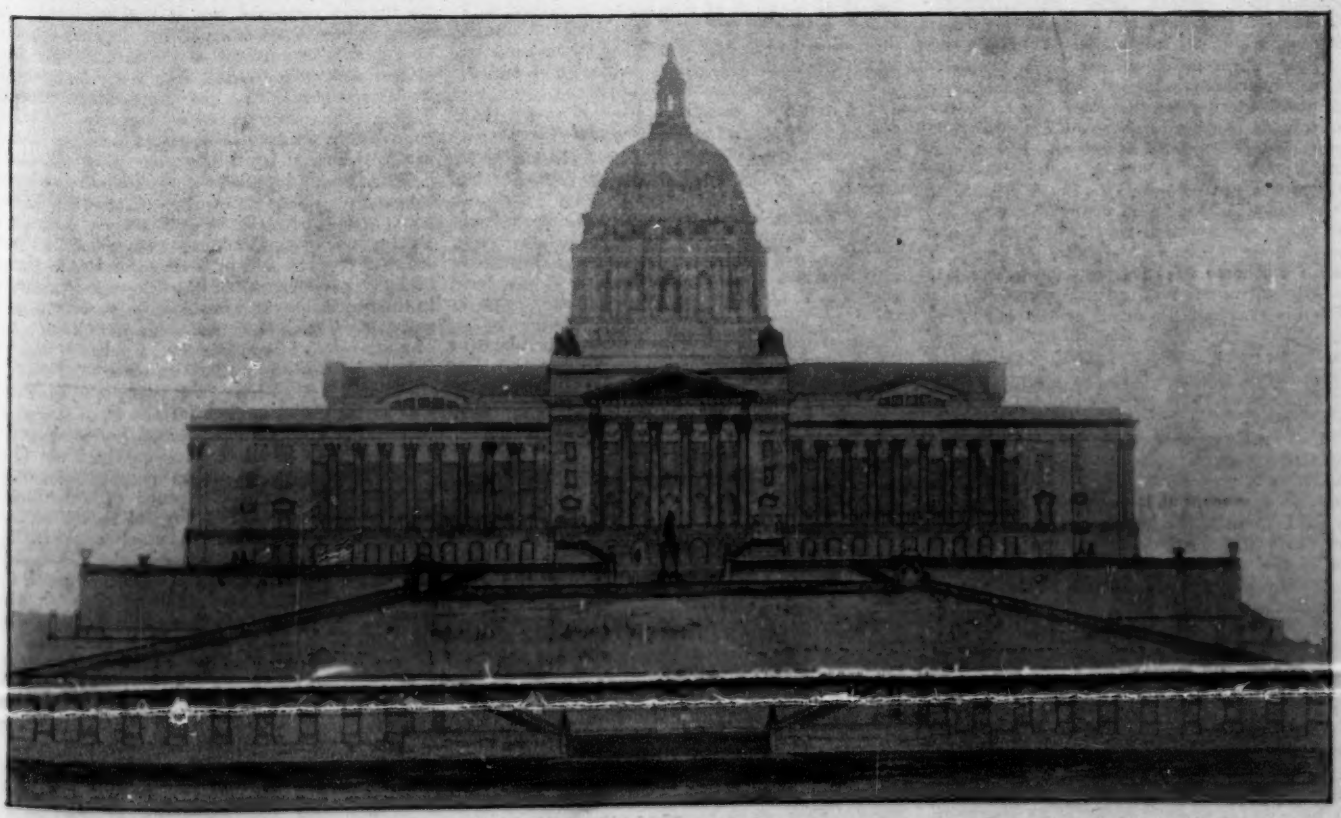
The Position of the Institute.

The points which I would ask you to consider with me to-night are: the position of this Institute, the position of the architect, Registration, and education. I will deal first with the position of the Institute.

We have in the last two or three years incurred a large expenditure, and this has induced some anxiety among our members in regard to the future. I think I can safely reassure any member who has an uncomfortable feeling of insecurity. As a body this Institute has never been so strong as it is to-day. The total of its membership, including Licentiates, amounts to some 4,700, in addition to the numerous class of probationers and students from whom the members of the future will be drawn; and I would remind those of the latter class to whom the Insurance Act applies that an Architects' and Surveyors' Approved Society under the Act has lately been formed by the Architectural Association, with the approval of this Institute and of the Surveyors' Institution. The net-work of allied societies, working in close relation with the central body, now covers not only the United Kingdom, but practically the whole of the English-speaking Dominions, and your Council has recently taken in hand the consideration of the relations of the allied societies *inter se* and to this Institute, in order that no district shall be without a representative body to assist the architects practising within its boundaries. The constant reference to the Institute in matters of public importance I need not touch on, because it is a matter of common knowledge to all of you. In regard to our financial position, as freeholders of these fine premises which have recently been enlarged and improved, the Institute is in a more secure position that it was two years ago, when it was merely the holder of a lease of half these premises with some fifty years to run. Such a serious undertaking has necessarily put a temporary strain on our finances. In the years 1909, 1910, and 1911 the Institute spent about 31,000*l.* on the purchase of these premises and their repairs and rearrangement, skilfully carried out by our Hon. Secretary, Mr. Hare. In addition to this, the Town-Planning Conference involved a capital expenditure of 2,235*l.* To meet these liabilities the Institute had in hand 21,095*l.* capital. The result was that during these years we had to borrow from our bankers the sum of 12,144*l.* But the soundness of our finances is shown by the fact that by the end of last year our indebtedness was reduced to some 9,000*l.*, and we have reason to believe that in this and following years an annual surplus of income over expenditure will enable us to reduce our debt by at least 1,000*l.* a year. I need hardly say that the sooner the whole of this debt is wiped off the better, and this is the more necessary as there still remains to be dealt with the mortgage of 4,000*l.* which we took over with these premises from the Architectural Union Company. There is much that the Institute would like to do, and yet hopes to do in the future, which your Council do not feel justified in undertaking till this debt is cleared: our splendid architectural library, for example, perhaps the finest in this country, should be kept up-to-date by the purchase of the best contemporary publications, both in this country and abroad, but at present your Council is not always able to follow the legitimate representations of the Literature Committee for financial reasons. Then there is the pressing question of the payment of our examiners, long ago recommended by the Board of Architectural Education, but as yet unrealised for the same reason, and all that the Institute can offer to these gentlemen who place at its disposal their highly-skilled and valuable services is its platonic, if very genuine gratitude. I would remind you also that the promotion of Registration, whatever form it may take, must in any case mean the expenditure of money, possibly of a good deal of it. I venture to suggest one obvious means of adding to the sinews of war, and that is that those Associates who are qualified for the Fellowship should take up their Fellowship without further to-do. The status of a Fellow of the Royal Institute of British Architects is assuredly a distinction, and I suggest to you that all our Associates ought in due course to proceed to the Fellowship, and that the senior Associates should give a lead to their juniors by taking up their Fellowships at once. I appeal to you as good sportsmen to lend a hand in this very practical way, having regard to the facts that I have now laid before you. I would say again that our position is perfectly sound, but it is only common sense to deal with our existing liabilities before we embark on large enterprises, whose end, however desirable, must be to some extent problematical.

The Position of the Architect.

The position of the architect as a professional man has given ground for a good deal of anxious consideration in the last year or two. Adverse verdicts have been given in the Courts, which appear to saddle us with unfair and impossible responsibilities, and there can be no doubt that the position of a practising architect to-day is more difficult than it was forty years ago. He is expected to know a great deal more, and to do a great deal more for his money, than was expected of his predecessors in the halcyon days of the 'seventies. Applied science has developed



Missouri State Capitol: Rear Elevation. Winning Design, by Messrs. Tracy & Swartwout.

D

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The second commended design, No. 18, by Messrs. Batchelor & Hicks, FF.R.I.B.A., of Dublin, is a departure from the prevalent classical treatment, and consists of buildings in the Tudor style grouped round one large and four subsidiary quadrangles. A collegiate atmosphere has thus been attained by the authors, which is emphasised by the well-conceived entrance-gateway and tower marking the arched entrance to the main quadrangle, and utterly marred by a somewhat meaningless tower and spire placed at the junction of the Hatch-street and Earlsfort-terrace façades, which, by its height and character, overpowers the whole building. The planning is occasionally devious, although the grouping of the sections is in many respects excellent, and the setting back of the main frontage to form an entrance courtyard gives great depth to the building. The style adopted affords opportunities for design which have been fully seized by the authors, the assembly-hall being noteworthy in this respect.

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In design No. 20 may be found several features of interest, including two excellent elevations in the classic manner. The central entrance is emphasised by a flattish dome placed over the main hall, which, with the vigorous columnar treatment of the portico, gives an appearance of stateliness to the whole design. The examination-hall has been boldly thrown athwart the centre of the southern wing—these plans being based on the single-quadrangle principle—and the tetrastyle portico to this hall is made the chief feature of the Hatch-street elevation, balanced by the pavilions forming the termination of the eastern and western wings. The planning, otherwise good, has the serious defect of central corridors, lit for the major portion of their length by glazed screens in the walls of the rooms on either side. Such an imperfection is too weighty for even this otherwise most-carefully designed building to overcome.

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In this brief review it has naturally been impossible to deal with each of the twenty-one designs submitted, or even with all of the best of them. As far as possible those selected are typical of a class or of a principle. One feature of the competition, however, calls for remark, having regard to the fact that, with few exceptions, a new generation of architects is in practice in Ireland since the last opportunity of an equally important competition was afforded the profession. It is the influence of the Neo-Greek element which permeates so much of the work under review. It is quite clear that young Irish architects are again turning their attention to the careful study of classical examples, and are abandoning to a large extent the Gothic tradition which was followed for a large portion of the XIXth century, and which was caused doubtless by the era of church building in that period.

MISSOURI STATE CAPITOL COMPETITION.

JEFFERSON CITY, the Capitol of Missouri, is located on the Missouri River between St. Louis and Kansas City, and the site of the new Capitol lies on a promontory visible for miles up and down the river and 100 ft. above its level.

A domed building with one axis on the main street of the city was called for, but the orientation was left to the competitor. The winning design, by Messrs. Tracy & Swartwout, architects, of New York City, takes the long axis of the building parallel to the river and fulfils the requirements of the programme in a thoroughly practical manner. In describing his plan, Mr. Swartwout emphasised three elements: (1) Complete circuit of offices on the outside; (2) uninterrupted circulation; (3) the relation of Senate and House and the vestibule and library. Furthermore, "the secondary stairs and elevators are in the four corners of the building, just off the circulation, and so placed that members of the Legislature can go from either side directly to their coatrooms without passing through the lobbies."

A feature of the design not found in other State Capitols is the splendid opening up of the plan and section from the entrance portico and steps through a high vaulted stair hall to the dome.

We may mention that other buildings by the same firm include the Post Office, Denver, Colorado; Connecticut Savings Bank, New Haven, Conn.; Yale University Club Building, New York City; Home Club Building, New York City; Metropolitan Bank, Washington D.C. We are indebted to our contemporary, the *American Architect*, for permission to reproduce the winning design, which we shall further illustrate next week.

HOUSING SCHEME, CHELMSFORD.

As the first instalment of their extensive scheme the Town Council have just completed the erection of thirty-eight workmen's dwellings. The Corporation bought the site of 6 acres at 275*l.* per acre, and will build 140 cottages, with gardens, to be let at rents of 6s., 5s., and 4s., according to the accommodation. The thirty-eight now built are of red brick with tiled roofs; they cost 5,310*l.*, and the rents amount to 455*l.* per annum; there were ninety-six applicants for the first two that were built.

RE-INAUGURATION OF THE CHAPEL OF THE ORDER OF THE BATH.

Mr. Lionel Earle, C.B., C.M.G., the newly-appointed Secretary to H.M.S. Office of Works, is nominated as a member of a committee who are charged with arranging for an installation ceremony in King Henry VII.'s Chapel, Westminster Abbey, in the autumn of next year. It is proposed to revive, as far as modern conditions will allow, the connexion of the Order of the Bath with the chapel wherein the last installation of Knights of the Order was held in June, 1812.

OPENING MEETING OF SESSION AND PRESIDENTIAL ADDRESS.

THE first general meeting (ordinary) of session 1912-13 of the Royal Institute of British Architects was held on Monday, at No. 9, Conduit-street, W., the President, Mr. Reginald Blomfield, A.R.A., presiding.

The minutes of the last meeting having been taken as read, and the announcement that the Council had admitted the Hampshire and Isle of Wight Association of Architects to alliance having been made,

The President delivered the following address:—

"It has become the custom of this Institute to look to its Presidential addresses for announcements on matters of serious interest to the profession, for the foreshadowings of policy, sometimes for sanguine anticipations of ideals that we should all like to see realised. You will recollect the frankness of my predecessor in this chair, and the zeal with which he attacked the difficult problems which confronted him during his term of office. Many circumstances combined to make his tenure of office more than usually full of arduous situations. I who have the honour to succeed him do not look for a series of alarums and excursions. Rather, so far as I can see, the time has come for a steady consideration of our position and for a period of serious, if less brilliant, development on practicable lines. I hope I shall not disappoint you if I say that I have no heroic policy to offer you, no infallible panacea for the many difficulties that lie before us; but I shall ask you to follow me in the suggestions which I shall put before you as to the present position, and to help me on your part with your clear, unprejudiced, and close attention.

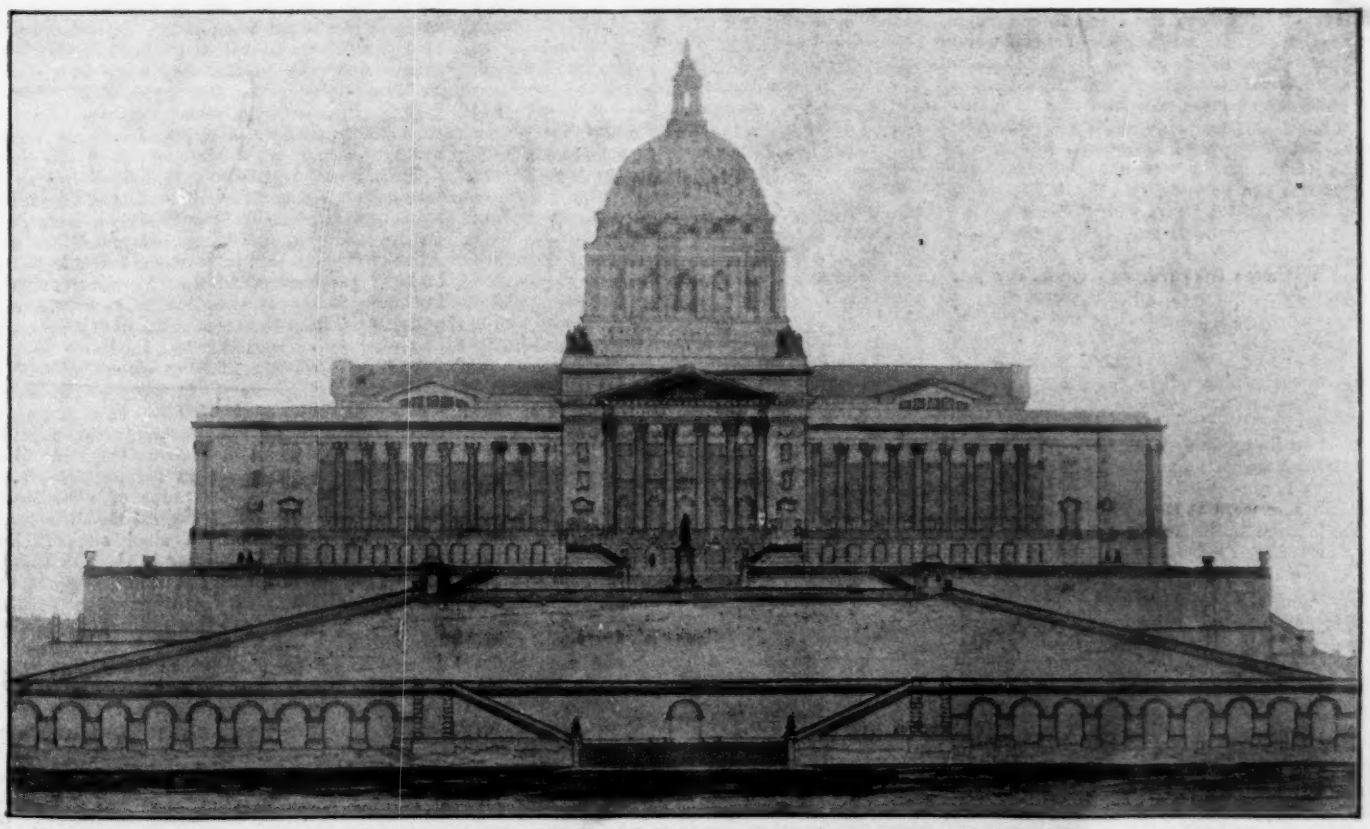
The Position of the Institute.

The points which I would ask you to consider with me to-night are: the position of this Institute, the position of the architect, Registration, and education. I will deal first with the position of the Institute.

We have in the last two or three years incurred a large expenditure, and this has induced some anxiety among our members in regard to the future. I think I can safely reassure any member who has an uncomfortable feeling of insecurity. As a body this Institute has never been so strong as it is to-day. The total of its membership, including Licentiates, amounts to some 4,700, in addition to the numerous class of probationers and students from whom the members of the future will be drawn; and I would remind those of the latter class to whom the Insurance Act applies that an Architects' and Surveyors' Approved Society under the Act has lately been formed by the Architectural Association, with the approval of this Institute and of the Surveyors' Institution. The net-work of allied societies, working in close relation with the central body, now covers not only the United Kingdom, but practically the whole of the English-speaking Dominions, and your Council has recently taken in hand the consideration of the relations of the allied societies *inter se* and to this Institute, in order that no district shall be without a representative body to assist the architects practising within its boundaries. The constant reference to the Institute in matters of public importance I need not touch on, because it is a matter of common knowledge to all of you. In regard to our financial position, as freeholders of these fine premises which have recently been enlarged and improved, the Institute is in a more secure position that it was two years ago, when it was merely the holder of a lease of half these premises with some fifty years to run. Such a serious undertaking has necessarily put a temporary strain on our finances. In the years 1909, 1910, and 1911 the Institute spent about 31,000*l.* on the purchase of these premises and their repairs and rearrangement, skilfully carried out by our Hon. Secretary, Mr. Hare. In addition to this, the Town-Planning Conference involved a capital expenditure of 2,235*l.* To meet these liabilities the Institute had in hand 21,095*l.* capital. The result was that during these years we had to borrow from our bankers the sum of 12,144*l.* But the soundness of our finances is shown by the fact that by the end of last year our indebtedness was reduced to some 9,000*l.*, and we have reason to believe that in this and following years an annual surplus of income over expenditure will enable us to reduce our debt by at least 1,000*l.* a year. I need hardly say that the sooner the whole of this debt is wiped off the better, and this is the more necessary as there still remains to be dealt with the mortgage of 4,000*l.* which we took over with these premises from the Architectural Union Company. There is much that the Institute would like to do, and yet hopes to do in the future, which your Council do not feel justified in undertaking till this debt is cleared: our splendid architectural library, for example, perhaps the finest in this country, should be kept up-to-date by the purchase of the best contemporary publications, both in this country and abroad, but at present your Council is not always able to follow the legitimate representations of the Literature Committee for financial reasons. Then there is the pressing question of the payment of our examiners, long ago recommended by the Board of Architectural Education, but as yet unrealised for the same reason, and all that the Institute can offer to these gentlemen who place at its disposal their highly-skilled and valuable services is its platonic, if very genuine gratitude. I would remind you also that the promotion of Registration, whatever form it may take, must in any case mean the expenditure of money, possibly of a good deal of it. I venture to suggest one obvious means of adding to the sinews of war, and that is that those Associates who are qualified for the Fellowship should take up their Fellowship without further to-do. The status of a Fellow of the Royal Institute of British Architects is assuredly a distinction, and I suggest to you that all our Associates ought in due course to proceed to the Fellowship, and that the senior Associates should give a lead to their juniors by taking up their Fellowships at once. I appeal to you as good sportsmen to lend a hand in this very practical way, having regard to the facts that I have now laid before you. I would say again that our position is perfectly sound, but it is only common sense to deal with our existing liabilities before we embark on large enterprises, whose end, however desirable, must be to some extent problematical.

The Position of the Architect.

The position of the architect as a professional man has given ground for a good deal of anxious consideration in the last year or two. Adverse verdicts have been given in the Courts, which appear to saddle us with unfair and impossible responsibilities, and there can be no doubt that the position of a practising architect to-day is more difficult than it was forty years ago. He is expected to know a great deal more, and to do a great deal more for his money, than was expected of his predecessors in the halcyon days of the 'seventies. Applied science has developed



Missouri State Capitol: Rear Elevation. Winning Design, by Messrs. Tracy & Swartwout.

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so fast and in so many directions that it is impossible for an architect to keep pace with every branch of it; and beside all this, he has his own art to master. For when all is said and done, the first business of an architect, that which differentiates him from other men, is his power and knowledge of design; and that, in the chaos of modern styles and the kaleidoscope of fashion, is not less but more difficult to acquire now than it was 150 years ago when everybody worked in one manner as a matter of course and every village builder knew the Orders. And it is more difficult than it was fifty or sixty years ago when hygiene was a negligible quantity, electricity as a commercial power unknown, and the builder was a man who really knew something of the practice of building. At the same time, I think there has been an unnecessary scare in this matter. We architects have, and have always had, our responsibilities to our clients, and, provided an architect knows his business, watches his work, and takes due care of his clients' interests, I do not think his position is one of greater danger than that of other professional men. The pressure of competition is keener than it used to be, and the standard of attainment is higher, but this is due in the one case to causes beyond our control, in the other to our own efforts; and what we have to do is, on our part, to qualify ourselves for our responsibilities, and to stimulate in the public a more intelligent appreciation of the services that an architect can and ought to render. If the public understood that an architect is an individual with the necessary limits of an individual, and not merely a wholesale *entrepreneur* on the one hand, or a building policeman on the other, there would be less of the regrettable misunderstandings that sometimes occur in the practice of architecture—but architects should not forget that the only effective passport to the appreciation of the public is the merit of their own personal work, and that if the profession of architecture is to receive a higher recognition in the State than it obtains at present it can only do so by ensuring a high standard of education and attainment among its individual members.

Registration.

This brings me to the thorny question of Registration. In this matter, if you will bear with me, I wish to explain certain developments that have formed part of the history of this Institute. Over twenty years ago I had the honour to be an Associate Member of Council, and about that time a move was made in the direction of Registration, which appeared to some of us, old as well as young, to be heading off architecture into a *cul-de-sac* of unmitigated professionalism. But since those days much water has flowed under the bridge. Free discussion has cleared away the misunderstandings of earlier days, the Institute has taken a very active and, if I may say so, in regard to its members, self-sacrificing part in the reorganisation of education, and there has grown up a fairly general consensus of opinion that Registration, in some shape or another, is desirable, not only in the interests of architects, but in the interests of the public. So far this Institute is pledged to the policy stated in the Report of the Committee of 1907, and your Council has for some years endeavoured to give effect to that policy. Your Council can hardly hope to produce a scheme that will at once satisfy all, or nearly all, shades of opinion, and also be within the range of practical politics—this last is important—for I think you will agree with me that, if you run a horse, you should run him for all he is worth, and that it is unworthy of serious men of affairs to waste time and money on mere *ballons d'essai*. We are after a practical scheme, one that will protect both the public and architects. Various solutions have been proposed. So far none of them have met with general acceptance, but it must not be supposed that the labours of the last few years have been wholly in vain. They have at least shown us some of the difficulties in the way, and have brought it home to thoughtful men that this is a very difficult and intricate problem not to be settled off-hand, and that if a real and satisfactory solution is to be found for it, that solution will have to be built up by careful and exhaustive consideration of the case in all its aspects; of what is required by the public, of what is due to the architect, and of the effect of any such scheme on other professional bodies whose interests may be affected. And if after this careful consideration it is found to be impossible to go quite so far as some of the more ardent of our Registrationists might desire, I would remind them that half a loaf is better than no bread, and I would appeal to them, and indeed to all of our critics, to have patience and not to take the bit in their mouths and bolt. It is no use striking before the iron is hot, and it has become clear that there are many issues to this question, all of which must be dealt with before it will be possible to reach the psychological moment of solution. The conditions of modern society are so complex that it is impossible to deal with any of its problems in watertight compartments. What may appear to us as very clearly in the public interest may seem less convincing to our neighbours on the other side of the fence; and the experience of history is conclusive that drastic changes are not to be made *uno ictu*. If such changes are to take their permanent place in the social organisation, they will only do so as the result of much previous effort, of anxious thought, of the slow attrition of those awkward angles which have split up many a well-meant scheme of reform. One of the first acts of your new Council has been to appoint a large and carefully-selected Committee to consider the whole question of Registration, and it has strengthened it by the addition of a number of representative members from the provinces. I would ask you to give this Committee time to deal with the question in all its bearings, and, when the recommendations of the Council come before you, not to look for impossibilities, but to give it your careful consideration as practical men of affairs, and with an anxious regard to the future of architecture. For, after all, whether members of the Council or not, we are but trustees for the next generation, and it should be our business to hand on our inheritance, not tarnished or diminished, but greater and more splendid, because it is held on the terms of a higher standard of attainment. On one point I feel sure we shall all agree. The object of a Registration scheme should not be to make architecture a close profession, regardless of professional skill. We do not want to repeat the history of the Trade Guilds in their later days, when their object was to surround their members with a jealously-guarded ring-fence of monopoly. Our object is to put a stop to incompetence, and to establish and maintain a reasonable level of accomplishment, and to see that that level is reached by those who undertake the very responsible work of an architect. There is not a man in this room who would not say "*la carrière ouverte aux talent*," but what we insist on is that the "talent" should really be there, and that is the substantial issue to which Registration should be directed. It should be really and effectually the hall-mark of professional competence.

Education.

So, by this roundabout way, we come back to the vital question of education, or rather, as I should prefer to put it, a sound and thorough professional and artistic training as the basis on which any form of Registration must be founded. If we are to obtain public and formal recognition of the fact that architecture is not an art that can be practised by Dick, Tom, and Harry with advantage to the community, and that there is a difference in kind between the work of the trained designer and the architectural efforts of the gentleman who combines the practice of architect, auctioneer, and estate agent, we shall see to it, not only that our present standard is maintained by all who enter our ranks, but also that it is slowly and surely raised, so that there can be no question as to who is and who is not qualified to undertake the work that legitimately falls to an architect.

It is to this object that the Institute, through its Board of Architectural Education, has steadily applied itself during the last few years. Sir Aston Webb was the first and most admirable Chairman of that Board. I had the honour of succeeding him, and we can both testify to the unswerving sympathy and support which the Institute, through its Council, gave to that Board, and thereby enabled it to carry out the important and far-reaching reorganisation of architectural training, which has been quietly going on for the last few years. The syllabus of training for architectural students has been thoroughly overhauled, and quite recently a serious attempt has been made to render our examination a more effective and intelligent test of architectural capacity, and also a real stimulus to the artistic enthusiasm of our students. Design, the adequate invention of buildings which are good to live in and to look at, is, after all, the essential object of our training Many studies are necessary as subsidiary to this, but the aim of our training must always be to make our students competent architects, artists to whom the methods and materials of building are as his canvas and colours to the painter, or his bronze and marble to the sculptor. The initiation of a test in design, which is to some extent competitive, is an important step forward and a further development of that reorganisation of our methods of training which has been one of the most valuable constructive works carried out by the Institute during the last few years. And by design I do not mean scene-painting. Under modern conditions it is more than ever imperative that power of design and knowledge of construction should go hand-in-hand—that the architect should have the technical knowledge of building necessary to realise the flights of his imagination. Where the engineer stops at construction, the architect, as an artist, sees further possibilities of beautiful form and its combinations, and he should possess sufficient knowledge at any rate to start the realisation of these possibilities.

Architecture and Science.

At the meeting of the British Association in September last Professor Archibald Barr gave a very able address on the duty of the engineer to the community, and in the course of it called attention to the unfortunate severance of engineering from artistic design. The engineer, he said, takes a too exclusively utilitarian view of his calling, and architects have not sufficiently mastered the science of steel construction to be able to design in it freely. I think there can be little doubt that Professor Barr is right in this contention; and the conclusion to be drawn from it is that in the modern practice of architecture the necessity of the study of scientific construction becomes more and more urgent. That is a point that will not be lost sight of in our scheme of architectural training, and I may assure you that on this point our examiners are adamant. Yet there are one or two considerations which I venture to offer, to reassure the old-fashioned lover of bricks and mortar. I do not believe that the whole future of architecture rests with steel construction or reinforced concrete, any more than I can believe that the whole future of painting lies with the Post-Impressionists or the Cubists. Brickwork and masonry must always hold their place in building, and, though architects will do well to avail themselves of all the resources of applied science, that is no reason for throwing up their familiar tools and rushing headlong into methods, however brilliant their promise, which have not yet stood the test of time.

We artists have to live in an age of science, and science is steadily invading the territory of the arts; not content with brushing us aside as people of no account, it has stolen our one ewe lamb, it has annexed the term "beauty" for its own purposes, and misled the public by using it in a sense of its own. In consequence of this insidious misuse of the middle term, we artists wake up to find our work judged by irrelevant standards, and condemned accordingly. One hears the term "beauty" applied to subjects so diverse as St. Paul's or Westminster Abbey, to the steelwork of the Gare d'Orléans or to some complicated piece of machinery. Now, it is obvious that the same thing cannot be meant in each of these instances. In the case of the buildings, we mean that our sense of rhythm and proportion, our enjoyment of light and shade and the like are gratified; in the two latter cases that we derive intellectual satisfaction from the exact solution of a problem of construction or mechanical function; and it is only because we are lazy or careless of speech that we talk of "beauty" in the case of the steel roof or the steam engine. There is, of course, a borderland, where our pleasure is partly æsthetic and partly intellectual, such as the scale of a great dam or the lines in perspective of an ironclad. But from the point of view dealt with by Professor Barr I suggest that the term "beauty" as applied to steel construction means technical beauty—that is, that its appeal will be to the intellectual satisfaction given by perfectly efficient work, rather than to the æsthetic enjoyment to be derived from the "ordonnance" of noble architecture. One is, therefore, the less daunted, and I do not think that architecture is going to be stranded high and dry by the engineer; but I heartily endorse Professor Barr's appeal for more thorough study of construction and for closer co-operation between the engineer and the architect. The two should pull together and should do so from the first. It is no use asking an engineer to design a bridge, or even a shopfront as was recently suggested, and afterwards calling on an

architect to invest it with "artistic merit." Both architect and engineer will have their views on the main form and distribution, but they will have studied the problem from different points of view, and it is only by laying their different points of view together, before the treatment of the problem as a whole is decided on, that it will be possible to attain the unity of effect essential to monumental architecture.

The Universities and the Institute.

I would take this opportunity of expressing our appreciation of the admirable spirit in which several of the Universities have endeavoured to give effect to the Institute scheme in their schools of architecture. The control of the Institute over the training of architectural students has been placed on an efficient basis by the organisation of the system of external examiners. The Institute has been brought into satisfactory relations with the Universities, and is now recognised by them as the official centre of reference for questions concerned with the training of architectural students. We have our representatives in the schools of London University, the Architectural Association, Cambridge, Manchester, Liverpool, Sheffield, Glasgow, and Edinburgh; and finally, at the invitation of the Board of Education at Whitehall, the Institute has undertaken to conduct, next year, the examinations in architecture of candidates in the National Competition of Art Students. The horizon of the work of this Institute is steadily widening, and the part that it is called on to play in the training of architects becomes each year of greater importance, of vital importance, to the next generation of architects, and scarcely less so to the public and to our own members, because, as I have ventured to assert already, trained technical ability must be the basis of statutory recognition.

The New School at Rome.

In this branch of the work of the Institute prospects are very much brighter than they have been hitherto. The Jarvis Bequest has placed at the disposal of the Institute annually a scholarship of 200*l.* a year tenable for two years; and within the present year, through the generosity of the Commissioners of the 1851 Exhibition, the new School at Rome, long dreamt of by this Institute, has been established by Royal Charter; the first instalment of the building is already in hand, and a scholarship of 200*l.* a year tenable at this school for three years is to be awarded annually. The Institute has offered its hospitality to the Commissioners in regard to the examination for this scholarship, which will be the blue ribbon of the year. The jury will be the Faculty of Architecture, all of whom are members of this Institute. In these scholarships, and in the gold and silver medals of the Royal Academy, not to mention other scholarships and prizes, there are solid inducements to tempt the young man of genius out of his hiding. The importance of the scholarships tenable in the School at Rome will be obvious to all who recall their own days of studentship, those aimless and often solitary wanderings on the Continent, pleasant enough as a sketcher's pilgrimage in search of the picturesque, but of little value as artistic training, owing to the absence of intellectual discipline and authoritative guidance. Indeed, as a student of the development of architecture, I am sometimes tempted to attribute the weak points of the architecture of the last fifty years to the habit of indiscriminate and undisciplined sketching. I regret to admit that we have all of us done it—sometimes, it is but fair to say in self-defence, from the sheer pleasure of drawing some very drawable object—the sheer joy of draughtsmanship—more often I fear from a certain laziness and disinclination for the hard thought involved in the critical analysis of architecture. The results, alas, have too often been an unlicensed orgy of details snatched from every land and every style! But the sketching and measuring of actual buildings with a clearly realised object, and carried out with the aim of artistic analysis, becomes of inestimable value to the student, especially when checked by the free discussion of students working together. For the first time students will have the chance of working together, and in touch with their brethren the painters and sculptors, in that city which must always be the mother of the arts. The School at Rome may take years of patient effort to perfect, but we may look for great things from it in the next generation. One of the most serious difficulties in the modern practice of architecture is the absence of tradition, the want of a common method and of a recognised standard of attainment. It is not too much to hope that in lapse of time it may be the privilege of the students at our School at Rome to restore this method and standard. That ideal is still far distant, and to complete our programme we must go further afield and enlist the help of all who care for our progress in the arts. I think the time has come when closer attention than it has hitherto received is due to the organisation of training in the arts in this country. Excellent work is done in our schools, but the schools are not sufficiently organised *inter se*, and there is need for further development both in regard to this and and also in regard to the advanced stages of training in the arts. Our schools bring the students up to a certain point, and far ahead for the brilliant few there will be the artistic paradise of the School at Rome, but there is an interval between these stages to be bridged over, so that others, not among the brilliant few, yet good men too, may have the benefit of the most advanced training in design, with all the resources of a great establishment and the benefit of the skill and experience of the most competent artists. I believe that the want can be met by the development of existing institutions, but it is one that will require very serious and anxious consideration, in co-operation with such educational establishments as the Royal Academy.

Training.

In this short survey of the present situation of what I may call architectural politics I have endeavoured to indicate a certain unity of idea, and even of fact, that underlies the whole position. If the architect is faced by graver responsibilities than heretofore he must meet them by mastering his business and attending to it. This means more thorough training. If as a profession we are to succeed in effecting such further official organisation as will protect both the public and ourselves from the depredations of poachers, the foundation-stone of that organisation must be systematic professional training, and it is, and will always be, one of the most responsible duties of the Institute to see that that training is really sufficient and its standard steadily maintained. In saying this I do not for one moment imply that our present methods of training are not efficient. They *are* efficient, whenever they are properly applied. The mischief is that they are not universally applied, or, to put it another way, that they are not insisted on in the case of all who set out to practise architecture. The strength of a chain is its weakest link, and, however strong a profession may be in individuals, it is the minimum of excellence that determines its position with the public. Thus it is that, by insistence on this training, with its corollary of a widespread level of accomplishment, we may hope to build up in the mind of the public a real understanding of architecture. I fear that until that is done we shall continue to suffer from the unfortunate vicissitudes of art in this country, those failures of method and intelligence which result in constant disappointments, only relieved at rare intervals by some effort of individual genius or patriotism. I will not dwell here on the alarming architectural results that may arise from the bureaucratic instinct, that growing centripetal tendency in our State and municipal departments which deprives the public of the use of the best ability in the country, and so far hinders it from getting the best value for its money.

National Monuments.

Nor need I enlarge on such matters as the lack of organised protection for our national monuments. A Bill for their protection is now being considered by a Committee of both Houses, and you will have fresh in your memory an astonishing piece of vandalism which was only rectified at the last moment through the munificence of a distinguished Statesman. Mistakes which are afterwards a source of the keenest regret seem to slip through by accident. In those far-distant days, when real ability and solid attainment will be the condition precedent to the practice of architecture, one may hope to see these evils remedied, because a sense of the place and value of architecture will be widespread among educated people. The serious importance of this art in the State will be realised, and with this keener sense of the gravity of the problems of architecture fuller trust will be given to those whose high calling it is to practise the art.

The Relation of the Architect to Himself.

Lastly—and this time it really is lastly—there is the relation of the architect to himself. So far I have been discussing his position in regard to the public. But more important than this is his own attitude to his career, the point of view from which he regards the work of his life. There is a real danger, in all this whirl of architectural politics, of our forgetting that first of all we are artists, and that the art which we practise is a very great and a very old one. The cares of business, the keenness of competition, the feverish haste of modern work are apt to reduce the lamp of art to the merest flicker if they do not put it out altogether. Those of us who have wide experience of practice know how difficult it is to keep that lamp alight, but here I am addressing myself not to my seniors and contemporaries, but to our younger members—to those who will take our places and carry on our work. Scholarship and research have always been among the best traditions of this Institute. I need only recall such names as Donaldson, Cockerell, and Penrose, and remind you that, whatever view one may take of the historical justness of the Gothic Revival, there can be no question of the intense enthusiasm that inspired the labours of such men as the younger Pugin, Street, Burges, and Nesfield. If you turn over the pages of the earlier volumes of our *Transactions* you will find papers on matters of serious interest, marked by a learning and ability that give them a permanent value in architectural literature. I hope, and I do not doubt, that that tradition will be worthily maintained by the rising generation. Current politics may be fascinating, but they are the outside of the cup and platter, they are a very poor substitute for that patient forging and perfecting of your artistic armament which will enable you later to practise your art with the enjoyment that comes of real mastery. And to those that have enthusiasm this labour will be a perennial delight, the joy that is to be won from the study of past art. Who of us, after all, does not look back with vivid pleasure to those wrestlings with the mysteries of some great cathedral, quiet hours with pencil, note-book, and 2 ft. rule spent in some exquisite chapter-house, long autumn rambles among the time-worn buildings of historic cities? These things are the privilege of the architectural student, and it is this touch with the past that gives to our work its abiding interest. You may recollect the old Greek game of the Lampadephoria, where runners took torches lit at the altars of Prometheus, Athene, and Hephaistos, and passed them from hand to hand till they reached the winning-post. That, gentlemen, is our position. It is our business to hand on the torch of architecture. Some of us may be getting old and stiff in the joints, and may have to content ourselves with painfully nursing the flame. It is for you of the younger generation so to train yourselves in your calling that, when the torch is passed into your hands, you may fan it to more vigorous life, and enable it to shine again with all the splendid brilliancy of the great ages of architecture."

The Earl of Plymouth,

in proposing a vote of thanks to the President for his address, said there was one subject on which he could say a few words—*i.e.*, ancient monuments. The President had reminded them that the Government had introduced a Bill into Parliament with the object of dealing with the preservation of ancient monuments, and a Committee was now sitting which had not yet reported, and so he could not say much on that occasion. But he could remind them that there were one or two difficulties which confronted them in dealing with the question. There were two extreme points of view in dealing with the question; one, the method that had rather been practised in this country hitherto of leaving alone those responsible for the protection of ancient monuments, whether they be trustees of more or less public bodies connected with such buildings, or private owners—leaving them alone in the hope that they would be alive to their responsibilities and would do their best to preserve these buildings in a proper way. Although there were interested bodies dealing with the preservation of ancient buildings, in this country they exercised such a limited control that it might be not unfairly said that we had hitherto gone to the extreme he had mentioned and had left matters alone. On the other hand, we had constantly quoted to us the practice of

[*Photo. by Whiffin.*

Archway, Lincoln's Inn-fields. (Demolished.)

other nations in Europe in the matter, but he thought we ought to be very careful of taking such a practice as a guide to ourselves. He very much doubted whether in all cases the power which had been placed in the hands of Government departments or bodies appointed for the purpose had been so very successful in the treatment of ancient buildings in European countries. At any rate, let us profit by their experience, and let us not hurriedly adopt methods which we might find not only did not suit us in this country, but had not been completely successful elsewhere. He hoped and believed that the Government were approaching the question with care. There were a good many who desired to constitute some organisation which should assist those who had the responsibility and care of ancient monuments to get expert advice from those who had a real knowledge of the proper way to preserve and restore old buildings. One of the greatest difficulties was to set up an Advisory Ancient Monuments Board which should have the complete confidence of the country, and whose advice and decision would carry weight with those who were interested. Although there were representatives of archæological societies and artistic bodies in this country who might well belong to such an advisory board, after all, it was to architects who had studied the construction and methods of buildings of ancient work to whom they had to look finally for the preservation of old buildings. Taste and knowledge had changed in the architectural profession, and in the whole country during the last half-century, and there was a general feeling that we had a duty to perform, and that we must take what means we could to preserve our ancient buildings, and it was to the Royal Institute of British Architects and its allied societies that one must finally turn for expert advice. We must proceed with care and caution and not be faddists in the matter.

Sir Aston Webb, C.B., R.A.,

seconded the motion, and said they congratulated themselves in having Mr. Reginald Blomfield as their President. They knew him as an architect of distinction, who had great literary gift, and who had written in a most useful and interesting way on English and French Renaissance. Their President had also taken a high University degree, and there was another side of his character which would appeal to the younger members of the profession, and that was that he was a good all-round sportsman; in short, he was a good all-round man. It was said that the practice of architecture made a man very one-sided, but in the case of their President they had a many-sided man, and if he had to describe him in technical language he would call him a "polygonal" President. He was glad to see Mr. Blomfield as their President, for he regarded him as a symbol of reconciliation and unity between the members of the profession; and the Institute would say "this our son was dead and is alive again, was lost and is found"; and, having found him, they intended to keep him and make the most of him. The members of the profession were more or less united now, and he believed there was a determination on the part of those who had the welfare of the Institute at heart, whether they believed in Registration or did not, to try and put their heads together and hit upon some means which would satisfy those who did not desire Registration, and also the undoubtedly large number who desired to see some form of Registration introduced. They were all determined if they could to hit upon some scheme and talk it out and submit it to the Institute, and thus to stop a troublous business which had gone on from year to year and which they were getting heartily tired of, and would like to see finished off, so as to leave the Institute free to take up those matters which would be of more advantage to architecture and the Institute. The President must look upon the education of architects as the principal object with which he was interested, and it was an object which he, the speaker, thought that the Institute could do untold good to architecture as well as to its members by attending to. They knew their President had largely helped to mould the scheme of education that was now gradually coming to a definite and organised form, and which, he believed, as it developed and was improved, would be of great use and advantage. The President had also adumbrated some advanced training which might take more or less the form of a diploma course; and he, the speaker, also hoped that something of the kind might be done, and he hoped that when the President retired after his period of office that that would be one of the things which had been accomplished. He did not think it was an impossible thing to do, and he thought it would be of very great use if the President could carry it out. The President mentioned the Royal Academy. He, the speaker, had no right to speak for that body, but he thought he knew enough of it to say that he believed that if it were approached it would give a very sympathetic hearing to the proposal, and would do what it could. The Royal Academy were far more ready to assist in schemes of the sort than some people seemed to suppose, and he was sure they would do all they could to assist. The work of the Institute divided itself into two divisions, and Lord Plymouth had indicated one when he referred to the case of ancient buildings. Another branch of the same division was the Architects' Benevolent Society, or the care of those who had fallen by the way, and in that connexion he might mention that the Society would be extremely glad to receive more help from members of the profession, as there were many more applications than there were funds adequately to deal with. The other division of the work of the Institute was education, about which there was reason to feel great hope—hope that they might be able by taking young men in hand to ensure that in the future there would be better trained architects than there were at present. Our art was different from all others, for it meant what Ruskin called "the fraternity of toil," and they must work together and help each other. No great buildings ever were built, or ever would be built, except by men who helped and assisted each other, and so it was they must all try and help young architects to get a better equipment in their career than the generation of present-day practising architects had had.

The vote of thanks was then heartily agreed to, and

The President,

in reply, called attention to the interesting collection of drawings on exhibition that evening—*i.e.*, the Drummond Stewart drawings—which had been the property of the Institute since the year 1838. He should like to read the following letter which their excellent Librarian, Mr. Dircks, had unearthed—a letter written by Sir Charles Barry to Professor Donaldson:—

4th May, 1838.

Dear Donaldson,—I have the pleasure to forward to you another collection of original drawings and designs by Gibieni and others, as a further donation to the Institute on the part of Sir James Drummond Stewart, who assures me that on account of their value in his estimation he should part with them with much regret if he were not persuaded that they will be fully appreciated by their new possessors.

The President announced that the next meeting will be held on the 18th inst., when Mr. J. L. Ball will read a paper on "Bath and Wells."

The meeting then concluded.

OLD HOUSES ON WEST SIDE OF LINCOLN'S INN-FIELDS.

It is interesting to note that history has a curious habit of repeating itself, especially in matters concerning architecture, and that early in the XVIIth century the need for controlling the development of streets and buildings was desired, just as it is required to-day. The gentlemen of the Inns of Court and Chancery and from the four parishes adjoining Lincoln's Inn-fields presented a petition early in the year 1617 to James I. asking "that the feildes commonly called Lincolnes Inn Feildes, being parcell of His Maties inheritance, might for their general Commoditie and health be converted into walkes after the same manner as Morefeildes are now made to the great pleasure and benefit of that Citty." The King, we are told, graciously approved of the matter, and the Privy Council in the same year issued a circular letter to the Lord Mayor and Aldermen, the Justices of the Peace for Middlesex, and the Benchers of Gray's Inn, Lincoln's Inn, Middle Temple, and "Inward" Temple, urging them to solicit subscriptions to meet the cost of "so worthie and commendable a worke." In 1618 a Commission was granted, and the Commissioners, among whom was the then Surveyor-General, Inigo Jones, were ordered to survey the Fields and obtain information concerning various nuisances then existing. An extract from the Patent Roll, James I., 16, reads:—"to inquire accordinglie of all other nuisances, inconveniences, and annoyances whatesoever whereby the ayre in those parts now is or in tyme may be corrupted or made unwholesome, and the same to demolishe, pull downe, and reforme," according to their discretion, and to take such order that "the said closes and grounds commonly called Lincolnes Inn Feildes according to [their] wisdomes and discrecions may be framed and reduced both for sweetness and unformitie and comlines into such walks, partitions, or other plottes and in such sorte, manner, and forme both for publique health and pleasure as by the said Inago Jones is or shalbe accordingly drawne by way of map or ground plott exhibited plained and sett out and approved by us."

The above information, culled from the London County Council's "Survey of London," Vol. III., clearly shows the connexion Inigo Jones had with the early arrangement of the Fields, but it is extremely doubtful if he were responsible for the design of the buildings. In other words, the Commission failed of its purpose, and by the year 1629 one William Newton, of Beddenham, in Bedfordshire, acquired the lease of a portion of the ground, and in 1638 purchased from Lady Cornwallis another portion. By February 14, 1638, a licence had been granted

to Newton to build thirty-two houses. He appears to have been very successful in this enterprise, and by 1641 some of the houses on the west side of the Fields had been built, together with others in Great Queen-street (two of the latter are still in existence). The style and character of the buildings shown on the "Prospect of Lincoln's Inn Fields," probably by Hollar, and the picture at Wilton House, *circ.* 1683, suggest the architectural influence of one well versed in the style exploited by Inigo Jones, and, although no direct documentary evidence exists to prove the authorship, it is more than probable that John Webb was the architect.

The houses forming the southern portion of Arch-row, and including Nos. 54 and 55, shown in the illustrations reproduced herewith, so called on account of the arched opening to Sardinia-street, formed part of William Newton's speculation, but they underwent considerable change and alteration during the years subsequent to their erection in 1639-41. The main portion of the basement stories and portions of the pilasters and bases can be taken to be part of the original work, but in the case of No. 55 the upper portion of the building suffered partial destruction by the fire which destroyed the Sardinian Chapel in 1759. If proof were required of this important fact, the absence of the bands decorating the pilasters of the other houses would confirm the partial rebuilding. The rate-books from the year 1700 to 1810 give the following list of occupiers for No. 54 :—

1700. "Don Lewis Du Cunha."
1703 and 1708. Portuguese Ambassador.
Before 1723 to 1798. Sardinian Ambassador.
1799 to 1807. The Rev. Charles Julian.
1808-9. Dr. Rigby.
1810. The Rev. R. Broderick.

And to this list can be added from other sources of information :—

1641-1654. The fifth Earl of Bath.
1654-1680. Countess of Bath.
1683. Lord Holles.
1687-8. The Order of Franciscans.

The occupiers of No. 55, from the same authority, were :—

1700. The Hon. Mary, Lady Dowager of Abergavenney.
1703-1708. Richard Snow.
1715-1739. W. Guidot.
1740. Julius Beckford.
1742-1749. Jas. Waller.
1745-1767. Sir Thos. Denison.
1768-1779. Sir William Blackstone.
1780-1782. — Poulter.
1783-1794. Mrs. Adair.
1795-1807. J. R. Baker.
1808. Robinson John.

To the above list may be added the following :—

From date of erection to some time before July 1, 1667. Launcelot Leake, Heneage, Fetherston, Humphrey Weld.
From some time before July 1, 1667, to at least 1675. Henry, Lord Arundell of Wardour.
1683. Lady Rider.

From a study of the picture of Lincoln's Inn-fields in the Wilton House Collection it is clear that the uniformity aimed at was not completely attained. Ralph drew attention to this in his "Critical View of the Public Buildings" (1739 edition), and he points out the discrepancy between the heights of the buildings at the centre of the west side.

Newcastle House, erected in 1686, further violated the uniform height of the buildings, and from this date until the closing years of the XVIIIth century, when many houses on the west side and practically the whole of those on the north side were in the process of rebuilding, uniformity in design was neglected. It is a matter for regret that new buildings have recently been erected, on each of the four sides of the square, without due regard to the harmony of the whole place. Even supposing that the exigencies of modern commerce need to receive first consideration, it should be possible to express such conditions in a quiet and dignified manner. To preserve the refined aspect of the west side of the Fields, it has been suggested that the existing façades to Nos. 57 and 58 and 59 and 60 be taken as a theme for the rebuilding. The extra height could unobtrusively rise behind such façades at a higher level than the existing cornice-line, and with the erection of new brick piers to correspond with the two now fronting the courtyards the grand character of the old work could be blended with the new.

GENERAL NEWS.

Professional Announcement.

Mr. Frank Lishman, A.R.I.B.A., of 12, Gray's Inn-square, London, W.C., has taken up the appointment of Consulting Architect to the Government of the United Provinces of Agra and Oudh, India, and his address will in future be "P.W.D., Allahabad."

Appointments: British Museum.

Mr. Arthur William Kaye Miller has been appointed by the Principal Trustees as Keeper of Printed Books, in succession to the late Dr. G. K. Fortescue, and Mr. William Barclay Squire as Assistant-Keeper, *vice* Mr. Miller, promoted.

The Elections.

In the recent Borough Council elections have been returned Mr. Doll (Holborn, unopposed), Mr. Pilditch (Westminster, unopposed), and Mr. Lorden (Wandsworth). For the City Guilds Mr. Charles Gasquet and Mr. Ernest Hepburn have been elected Masters of the Painters' and the Founders' Companies, respectively.

Ghent Exhibition, 1913.

The International Exhibition at Ghent next year will be notable for the general scheme of decoration. A rich ivory colour picked out with gold has been adopted for the buildings, and contrast will be obtained by the presence of leaded glasswork. Many of the larger windows will be as large as those of a cathedral, and all the windows will be of a size to make them play an essential part in the design of the buildings. The same colouring and design —that of the laurel-tree—runs through all this glass. It is interesting to know that the Palais des Fêtes, a permanent building, has been built partly upon the foundations of the fort constructed by Wellington at the time of the Waterloo campaign.

No. 34, Grove End-road, N.W.

The house in St. John's Wood of the late Sir Lawrence Alma Tadema, O.M., R.A., will, by order of his executrix, be offered for sale at the Mart in the course of next month. The house, designed and beautified by the artist for his own occupation, is freehold, and has two studios —one in the garden and the other, known as the Byzantine Studio, with a gallery, indoors. There are also an atrium, Dutch-room, palm-house, billiard-room, etc.

Two New Books.

Mr. B. T. Batsford will publish in a few days Mr. L. A. Shuffrey's long-promised work on "The English Fireplace and Its Accessories from the Earliest Times to the Nineteenth Century." He will also issue "Old Houses and Village Buildings in East Anglia," by Mr. Basil Oliver, A.R.I.B.A., forming the fifth volume of his "Old Cottage" series. Both volumes will be fully illustrated by collotype reproductions of photographs of the most interesting examples, accompanied by numerous sketches and measured drawings.

Open Spaces.

A project is opened to acquire Glenton House and grounds, the late Sir Robert Hensley's residence, which Lady Hensley is willing to sell for 3,000*l.* as an extension of Wandsworth Park.—For the extension of Wandsworth Common, with the inclusion of the farm, Trinity-road, and the 20 acres which the Commissioners of the Royal Patriotic Asylum are about to sell, the Wandsworth Borough Council have agreed, conditionally, to contribute 3,000*l.*, and Sir Edward Davis Stern is prepared, when the local subscription is closed, to make up the whole amount required, 12,000*l.* —reckoning 6,000*l.* from the London County Council and 1,500*l.* from Battersea Borough Council—with a donation of about 500*l.*—Mr. Edgar Dudley, Local Government Board Inspector, has held an inquiry at New Malden

[Photo. by Whitin.

55, Lincoln's Inn-fields. (To be demolished.)

into an application by the Malden and Coombe District Council for leave to borrow 3,600*l.* for purchasing a strip of about 18 acres as part of the scheme for the preservation of Wimbledon Common.—In various Ward meetings, held during the last two weeks, the ratepayers of Brighton have carried resolutions in support of the proposed purchase of about 1,000 acres of the Downs to the east of the borough boundary; the land has been revalued at 32,000*l.*, and the general feeling seems to be in favour of securing the land as an open space conditionally upon its not being appropriated for a large scheme of development—in the shape of, for instance, a garden suburb.—Lord Tredegar has given the Jews' Wood to Newport, provided that it be maintained in its present timbered condition, as a public recreation ground.—Lord Howard de Walden has presented an extensive piece of land for purposes of recreation to Chirk Village, Denbighshire, where the Castle is being repaired for his residence. Chirk Castle, originally built in 1011-3 and formerly the seat of the Myddeltons, was considerably altered and improved internally by Pugin.

BOOKS.

Architectural Drawing and Draughtsmen. By REGINALD BLOMFIELD, A.R.A. With 103 illustrations. (London: Cassell & Co., Ltd. Price 10s. 6d. net.)

WE are not surprised that a subject so attractive as architectural drawing should appeal to the author and illustrator of "A History of the English Renaissance," a book displaying an exceptionally masculine grasp of a great period of architectural development. The XVIIth century, and the XVIIIth, until nigh upon its close, when the Romantic revival burst upon it, was not characterised by evidences of imaginative power. It was an age of philosophies and of scholarly acquirements, and architecture, despite its notable achievements, attained these without that exuberance which accompanied the Renaissance in Italy and found relief in pictorial expression.

Mr. Reginald Blomfield makes it clear that, in his opinion, draughtsmanship and design must or should go hand in hand, and in this respect the present volume may be considered as a supplement to his former work.

Three kinds of architectural drawings are defined. Briefly they may be said to be (1) geometrical drawings set out to scale; (2) drawings which are intended to suggest, rather than formulate, an idea, or those which present some purely abstract conception of the artist's mind; (3) drawings which have taken architecture as their subject in distinction to figure, scenic, or still life. It is not quite apparent what other division could have been made. Yet it presents its immediate difficulties. Geometrical drawing is heavily handicapped when put into comparison with the others. It is purely literary and documentary. Again, supposing the drawing to be a reproduction by an engraver, or even when the original draughtsman has employed the burin instead of pen or pencil, the result must be judged subject to the limitations and qualifications of engraving. A drawing possessing spirit may become a tame affair under the engraver's ruler, or one that is unworthy may be rendered meritorious in skilful hands. Whose shall be the praise or dispraise? A great many of the illustrations in the book arouse this question. The whole subject indeed might be treated, or subdivided at least, from the standpoint of methods of production or of reproduction. Engraving alone includes so many processes that it would be a matter of difficulty to distinguish a particular hand when translated by one and the other. An engraving is made upon a wood block or a copperplate. As the first, it may be confined to the display of little more than outline as in its earlier stages of development, or it may show the wealth of resource possessed by the engravers of the commencement of the last century. Copperplate engraving includes line engraving, etching, mezzotint, and aquatint; and lithography is yet another medium. All these methods have been employed in architectural draughtsmanship, and the success of achievement depends on the progressive conditions of these particular arts.

From lack of material, there is little to be said regarding architectural drawings previous to the Renaissance. The author cites Villand de Honnecourt, and gives also an interesting drawing of German origin, belonging to the end of the XVth century. "It might," as he says, "be an interesting speculation to consider how far some of the qualities of mediæval architecture were due to the absence of organised working drawings: its informality, its habit of improvisation in detail, its irregularities and neglect of symmetry of design." Not until we reach the long line of Italian architects of the XVth and XVIth centuries do we find the examples we seek. Yet these have often to be judged as prints. Antonio San Gallo, Peruzzi, and Bramante were certainly draughtsmen. Bramante's fine engraving in the British Museum is evidence in his case that he was that, and skilled engraver besides. The frontispiece of the "Architettura" is given in support of Palladio. The illustrations in that volume are in the best style of wood block printing of the period—soft in quality yet firm in line, in every way an attractive instance of simple architectural demonstration. In the following century we meet with veritable masters in the art of portraying abstract conceptions. Mauro Tesi, Giuseppe Galli, and, finally, Piranesi. We have here reached the "rarer qualities of selection, insight, and imaginative power" which the author demands. Yet neither one nor other of these Italians was an architect. Tesi and Piranesi were engravers, and Galli was a scene-painter.

Upon these, however, too much praise cannot be bestowed, and the work is of their own hands, executed in line and wash or upon the copperplate. In one regard, viz., by the range of his imagination, Piranesi stands alone. Yet he had, as we venture to think, a prototype in, and of, another century, although the author does not refer to him when dealing with the later topographical draughtsmen. We mean Meryon, who, beyond his unassailable prestige as an etcher, was an accurate and refined draughtsman of architectural detail, qualities which he at times illuminated with curiosities of imagination that rivalled those of Piranesi.

The chapter upon "French Draughtsmen of the XVIIth Century" is not so successful in its claim upon our enthusiasm. Jean Lepautre was unquestionably a most accomplished engraver of architectural subjects, while to Della Bella we must feel gratitude for the relief he has afforded the mechanical productions of Marot, by the addition of his inimitable figures. France suffered from philosophers and encyclopædists in a greater degree than ourselves at that time. Yet from the great school of French engraving inspired by Callot and ending with Wille, we expected to find further examples, besides Perelle, which would have appealed to the author. The Flemish engravers ran Italy very close in the early days of the art, but reference is made to these only in order that the style of examples selected may be avoided. Isaac de Moucheron was, at least, a topographical artist of note.

When we come to the consideration of our own contribution to the cause of architectural draughtsmanship we do not hesitate to say that Mr. Blomfield's outlook and estimate produce on us a sense of depression that we do not think the true facts of the case can justify. As he points out, towards the close of the XVIIIth century architectural draughtsmanship, *per se*, and topography, each went off on their own lines. Was not this in itself evidence that the desirability of the first-named of these was anxious to recognise its responsibilities, and, as events proved, was on the road towards creating a level of work that certainly had not hitherto been reached? It is admitted that "Blore drew his Gothic very well, and both the Cockerells were accomplished draughtsmen." This is a great stride from Robert Adam, "bad at the figure and inaccurate in perspective," while "of architecture, its aims and possible merits, he was blandly unconscious." Folios of architectural detail were produced, from Stuart's "Athens" to Pugin's "Examples" that were accurate and explicit. Mere documents if you will, but documents of importance. Information too readily acquired from such sources may or may not have been prejudicial to natural architectural development. We gather that in the author's opinion they were. Nevertheless, they were the inevitable creations of the taste of the times. In topographical representation the school of English engraving was destined to reach the highest order. Following upon the meritorious Hollar and the worthy Loggan came, by the middle of the last century, a whole army of expert engravers. Their work—varying in excellence, though some at least was of the highest—may be found in the numerous books that were published. Turner got together an expert group of engravers to translate his drawings. Berwick, Clennell, Brandard, and the two Cookes were doing remarkable illustrations upon wood. The list of folio publications is too numerous to name. "Picturesque Tours Through the Cities of London and Westminster," a series of fine aquatints, may perhaps be cited as an example, while the engraved work of the brothers Le Keux should not be passed by without adequate recognition.

We have recognised the many difficulties that of necessity beset an author in dealing with a subject of this kind. The available examples by draughtsmen who are at the same time architects are small in number, the types at least represented by the drawings of Tesi and Galli. Yet it is the architects to whom we should naturally look, and in their place we have to follow the ups and downs of a reproductive art, or enroll the assistance of the topographical painter. Robert Adam hoped much from the attainment of "vistas." It is rather in the relationship of masses that great architectural conceptions are achieved, a quality allied to pictorial composition. This is the appeal that is made to us by great draughtsmen, and it is one that "Architectural Drawing and Draughtsmen" will do much to further. Though necessarily limited in its scope it is a book which commands attention, and will be received with a generous appreciation.

Portfolio of Measured Drawings issued by the School of Architecture in Connexion with the Victoria University of Manchester, the Manchester School of Technology, and the Manchester Municipal School of Art. Part I. (Published by the Municipal School of Art Manchester. 1912. 3s. net.)

THIS portfolio contains but four plates—three consisting of measured drawings and one a perspective sketch—of Hall i'th Wood, near Bolton, all the work of Mr. W. J. Roberts, a former student of the School under Professor S. H. Capper. These plates are prefaced by a short historical account of the house, and we welcome such a monograph, brief though it is, and realise the incentive to students of having their work recorded in some such permanent form. The drawings are very good of their kind, but we should have liked a few more. The constructive detail in such a house as this, erected at different periods, and presenting in the earlier part genuine timber construction with walls of "wattle and daub," and in the later solid masonry with deep-set mullioned windows in the manner of the North Country, has much to tell of the influence of material upon detail, and a plate might well have been devoted to details, which doubtless the student has drawn out. The plan of the house, by reason of the whims of successive building owners, has become curiously irregular, and it would have been an advantage if the several building dates—which seem to be fairly well determined—had been differentiated on the plan by hatching or other means at the discretion of the draughtsman. Such a practice makes clear the history of the fabric at a glance, and we hope it will be adopted wherever feasible in the forthcoming portfolios of the series. We also note the omission of any north point on the plan. It is gratifying to know that such an interesting house, native to the soil on which it stands, is being taken care of and used as a museum, for, owing to the generosity of Sir W. H. Lever, it has been acquired by the Corporation of Bolton. The drawings have been excellently reproduced and printed, together with the text, by the Photography and Printing Crafts Department of the Municipal School of Technology.

English and Welsh Cathedrals. By T. D. ATKINSON. (London: Methuen & Co., Ltd. Price 10s. 6d.)

MR. ATKINSON has written something better than a popular handbook on this subject. We are far from saying that a demand for a popular handbook is not desirable. It establishes the fact that there is an interest appealing to the average intelligence which should be met and fostered to the best of a publisher's ability. An appreciation of our monuments of architecture is, and may reasonably be, a welcome addition to the possible interests that belong to the holiday, or opportunities for sight-seeing, that come to the average person. But these

guides are, for the most part, written by the professional *cicerone*, or by one who can pretend to little or no training, whose eye cannot grasp the salient points presented by a building, and is therefore content to point out item by item such features as every observant beholder may see for himself. Mr. Atkinson brings the trained mind to bear upon his subject, and in doing so he does not make it in any way the less interesting or the less capable of comprehension. Indeed these qualities are strengthened by his judicious and reticent handling. We could wish perhaps that the "three-colour process" illustrations had been less obviously pretty, since they seem to us at variance with the restrained style of the author. One must view them as independent conceptions of a capable water-colour artist.

BOOKS RECEIVED.

THE SCIENCE OF ILLUMINATION. By Dr. L. Bloch. (London: John Murray. 6s. net.)

MODERN FRET-CUTTING. By John T. Makinson. (London: Crosby Lockwood & Son. 1s. 6d. net.)

THE ARBITRATION CLAUSE IN ENGINEERING AND BUILDING CONTRACTS. By E. J. Rimmer. (London: Constable & Co. 2s. net.)

PRIMER OF SCIENTIFIC MANAGEMENT. By Frank B. Gilbreth. (London: Constable & Co. 4s. net.)

BUTTERWORTH'S WORKMEN'S COMPENSATION CASES. Vol. V. (London: Butterworth & Co.)

JOSEPH FARQUHARSON, A.R.A. By Archdeacon Sinclair, D.D. The Art Annual, 1912. (London: Virtue & Co. 2s. 6d. net.)

THE LONDON COUNTY COUNCIL.

THE usual weekly meeting of the London County Council was held on Tuesday, in the County Hall, Spring-gardens, S.W., Lord Cheylesmere, Chairman, presiding.

Loans.—The Finance Committee recommended, and it was agreed, to make a loan of 3,880*l.* to the Islington Guardians for poor law purposes, and a loan of 600*l.* to the North Surrey School District Managers for poor law purposes.

New Chief Engineer.—On a recommendation of the General Purposes Committee it was unanimously agreed to appoint Mr. George William Humphreys, M.Inst.C.E., as Chief Engineer to the Council, at a salary of 2,000*l.*, in succession to Sir M. Fitzmaurice, who is retiring at the end of the year. Mr. Humphreys has hitherto been the Deputy Chief Engineer to the Council.

Strand Improvement.—The Improvements Committee recommended, and it was agreed, that, subject to the Westminster City Council agreeing to contribute one-sixth of the net cost, powers should be sought in the next session of Parliament to widen the Strand between Adam-street and Durham House-street.

CORRESPONDENCE.

Rebuilding Piccadilly-circus.

SIR,—The accompanying plan indicates a scheme for the rebuilding of Piccadilly-circus. The existing leases of the Crown lands are now about to fall in, which circumstance, if taken advantage of, renders the commencement of the scheme such as is indicated possible.

The small scale plan, which is a tracing from the Ordnance Survey, shows the existing buildings and the position of the circles, which indicate the amount of land now vacant which would be utilised for buildings, and also the sites of existing buildings that would be thrown into the roadways. It will be seen that these are about equal in area, so that what building space is lost in one position is gained in another.

Most street improvements entail a tremendous outlay, and the benefit accruing thereby is very seldom of a monetary nature. By continuing the buildings right round the Circus, not only would the architectural design be emphasised, but a considerable annual income would also be gained. Assuming only four floors over the archways are built, this would give, approximately, an increased floor space as indicated of about 51,000 ft. super., suitable for restaurants, offices, business, and other premises. This area could be increased by additional floors and by building the archways and the superstructure of larger dimensions in the length of the streets. The scheme lends itself to the control of street traffic, and the main lines of traffic are direct. "Islands" for pedestrians would be formed where shown, and also at both ends of the central piers carrying the arches at the entrance to each of the main streets.

The plan is only intended to indicate the scheme, and possibly by the planning of moving stairways at several convenient intervals, a colonnade of shops at a higher level could be worked in with an increased rental advantage. Provided the access is easy and the colonnade is of sufficient length to ensure a good variety of shops, it is submitted that there is no reason that such a plan should not be as successful in London as in the "Rows" of Chester. The Shaftesbury Memorial could be refixed in the central position, or the centre feature could be a memorial to King Edward VII., with a statue of the late King on a base of suitable design surrounded by sculpture.

G. F. M. MERRIMAN.

LEGAL COLUMN.

Intimidation.

The decision in the case, Young and others *v.* Peck, recently given in a Divisional Court, is one of some importance in view of disturbances arising out of labour disputes. Some thirteen persons were prosecuted by the police under the Conspiracy and Protection of Property Act, 1875, sect. 7, for intimidation.

The facts were that when a man in charge of a motor-waggon was leaving certain works the thirteen appellants, who at one time had been employed at the same works and were wearing white ribbons, were present when eggs were thrown at the carman, and there were cries of "Blacklegs!" "Dirty scabs!" Someone also struck the carman. The justices convicted, and on this appeal two points were raised by the defendants:—1. That the information could only be laid by the person intimidated and not by the police; 2. That the evidence showed that only two persons actually threw eggs, and the presence of the other eleven persons was not sufficient to render them liable to conviction for intimidation. The Court overruled both objections, and the convictions were confirmed.

Damages for Death of an Apprentice: Taff Vale Railway Company *v.* Jenkins.

A case which has necessitated considerable litigation and given rise to a divergence in judicial opinion has now been set at rest by a unanimous decision in the House of Lords.

A young woman, near the end of her apprenticeship as a dressmaker, was killed by the admitted negligence of the railway company. Her father, suing on behalf of himself and her mother, obtained a verdict for 75*l.* In the Court of Appeal one Lord Justice was in favour of dismissing the railway company's appeal, another for allowing it, whilst the third considered there should be a new trial. The evidence was that, at the termination of the articles of apprenticeship the deceased would have become able to earn wages in the same employ, and there was also evidence that she assisted her mother in the shop, and also made small sums in her spare time. The important point in the case, as it would apply to nearly all apprentices, was whether prospective earnings could be taken into consideration or whether damages could alone be given where actual earnings were proved, and the House of Lords unanimously held that the reasonable expectation of pecuniary benefit could be taken into consideration.

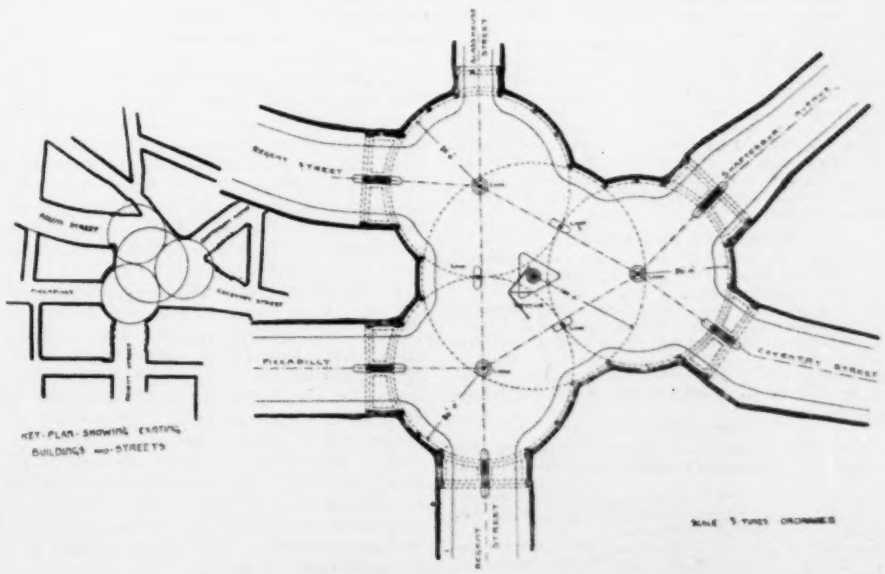
OBITUARY.

Dr. G. K. Fortescue.

We regret to announce the death on October 26, in his sixty-fifth year, of Dr. George Knottesford Fortescue, Keeper of the Printed Books, British Museum, who, as we stated in our issue of October 11, was about to retire, as on October 31, after forty-two years' service. Mr. Fortescue (LL.D., Aberdeen) was a son of the Very Rev. E. B. K. Fortescue, Provost of Perth Cathedral. He was educated at Harlow College; when twenty-three years old he left the Royal Navy for the post of Assistant in the Library, British Museum, where in 1884 he was appointed Superintendent of the Reading-room, and in 1890 Assistant-Keeper, and in 1899 Keeper, of the Printed Books. In 1901 he was elected President of the Library Association, and in 1909 President of the Bibliographical Society. Whilst the general course of Dr. Fortescue's official career does not come within our province, we may appositely recall that to him the public are indebted for the means by which he has greatly reduced the labour of research. Thirty-two years ago he originated the current subject-index of European books, including fresh editions of older works, received in the library. His first volume, for January, 1880—August, 1885, though not intended at first for publication, was printed with the Trustees' sanction in 1886. Other volumes have appeared from time to time; the complete series so far containing more than 417,000 references, with titles and press-marks, to modern works in the Museum. Dr. Fortescue was the author of "Napoleon and the Consulate," 1908, and a co-editor of "Romances of Royalty," thirteen volumes, 8vo—a personal history of France in the XVIIIth century as told by six of her most famous memoir-writers.

Mr. C. D. Szlumper, C.E.

The death, on October 27, is announced of Mr. Charles David Szlumper, C.E., aged forty years. Mr. Szlumper, the eldest son of Sir James Weeks Szlumper, C.E., ex-Mayor of Richmond, was educated under Professor Grimley, of Aberystwith, and at University College, London. When in the service of the Great Western Railway he was employed in the conversion of the broad to the narrow gauge, and was resident engineer for the Rheidol Railway, and, in succession to his father, was engineer to the Manchester and Milford line. He was also employed as a railway engineer in South Wales, and, with Messrs. Szlumper & Szlumper, upon projected schemes to relieve, by means of tube-lines, the congested road traffic of London.



Sketch Plan for Rebuilding Piccadilly-circus.

ILLUSTRATIONS.

University Buildings, Dublin.

MESSRS. DOOLIN & BUTLER'S design for the proposed new buildings to University College, Dublin, was placed first by the Assessor, Mr. Henry T. Hare, F.R.I.B.A., in the recent competition, the result of which we announced last week. Reference is made elsewhere (p. 533) to the competition as a whole.

Carnegie Library, Lincoln.

THIS building, of which we give an illustration, reproduced from the drawing which appeared in the Royal Academy this year, will be built of Ancaster stone with local brick backing and Westmorland green slates. The dome and cupola will be covered with lead. The accommodation will consist of an entrance hall with newsroom and reference library to right and left of the same, and lending library straight ahead, with librarian's room and staffroom on either side of the same; a ladies' reading-room, committee or students' room, book store, lavatories, etc., on ground floor, and a printroom on first floor over the entrance hall.

The architect is Mr. Reginald Blomfield, A.R.A., P.R.I.B.A.

Birmingham Council House Extension.

THESE illustrations are in connexion with the article beginning on p. 543, describing the construction of the building

MEETINGS.

FRIDAY, NOVEMBER 8.

Royal Sanitary Institute.—Mr. Henry C. Adams on "Sewage Disposal." 7 p.m.

Glasgow Technical College Architectural Craftsmen's Society.—Debate: "Single v. Separate Contracts." Opened by Mr. A. Davidson, architect, and Mr. A. Smith, contractor. 7.45 p.m.

SATURDAY, NOVEMBER 9.

Aberdeen Architectural Association.—Mr. D. T. Byres, A.M.Inst.C.E., on "House Drainage." Illustrated. 7.30 p.m.

MONDAY, NOVEMBER 11.

Architectural Association.—Mr. J. A. Marshall on "Marbles used in Greek, Roman, and Byzantine Buildings." 8 p.m.

Bristol Society of Architects.—Paper by Mr. Graham C. Awdry, entitled "Some Practical Remarks to Pupils, Assistants, and Young Architects." 6 p.m.

Surveyors' Institution.—The President, the Hon. Edward Gerald Strutt, will deliver an opening address. 8 p.m.

Royal Sanitary Institute (Lectures for Sanitary Officers).—Mr. Henry C. Adams on "Water Supply, Sources of Supply and Distribution." 7 p.m.

University of London (Victoria and Albert Museum).—Mr. Banister Fletcher on "Gothic Architecture in Central Italy and Sicily." 5 p.m.

The Incorporated Clerks of Works' Association (Carpenters' Hall, London-wall).—Monthly meeting. 7 p.m.

TUESDAY, NOVEMBER 12.

University of London (British Museum).—Mr. Kaines Smith on "The Age of the Dorians: Greece in the Making." 4.30 p.m.

Nottingham Architectural Society.—Fiftieth anniversary of the Society. Conversazione at the Exchange Hall.

Royal Sanitary Institute (Lectures for Sanitary Officers).—Mr. Henry C. Adams on "Scavenging, Disposal of House Refuse." 7 p.m.

The Royal Sanitary Institute.—Discussion on "The Report of the Departmental Committee on Intercepting Traps and House Drains." To be opened by Mr. H. Percy Boulnois, M.Inst.C.E. 8 p.m.

The Institution of Civil Engineers (To be held at the Institution of Mechanical Engineers, Storey's-gate, S.W.)—(1) Mr. B. Hall Blyth, jun., on "The Construction of the New Dock at Methil"; (2) Mr. W. Cleaver, M.Inst.C.E., on "Alterations and Improvements of the Port Talbot Docks and Railway During the Last Decade." 8 p.m.

WEDNESDAY, NOVEMBER 13.

Edinburgh Architectural Association.—Associates' paper: "Town Planning," by Mr. A. Lorne Campbell, F.R.I.B.A. Lantern slides. 8 p.m.

Northern Architectural Association.—The opening meeting of the session. Mr. Wm. Milburn, F.R.I.B.A., the President, will deliver the opening address. 7.30 p.m.

Manchester Society of Architects.—A paper will be read by Mr. J. H. Worthington, M.A., A.R.I.B.A. 6.30 p.m.

THURSDAY, NOVEMBER 14.

University of London (British Museum).—Mr. Banister Fletcher on "The Architecture of the Greeks." 4.30 p.m.

Builders' Benevolent Institution.—Sixty-fifth annual dinner, Whitehall Rooms, Hotel Métropole, W.C., Mr. F. G. Minter presiding. 6.30 p.m.

University of London (Victoria and Albert Museum).—Mr. Kaines Smith, M.A., on "Decoration of Buildings: Woodwork." 3.30 p.m.

The Concrete Institute.—Presidential address, by Mr. E. P. Wells, J.P. 7.30 p.m.

Sheffield Society of Architects and Surveyors.—Paper by Mr. F. H. Wrench, A.M.Inst.C.E., entitled "Some Notes on Surveying."

Institution of Electrical Engineers.—Address by the President, Mr. W. Duddell, F.R.S. Presentation of premiums. 8 p.m.

FRIDAY, NOVEMBER 15.

University Extension.—Visit to the Soane Museum, Lincoln's Inn-fields (Greek and Roman Antiquities). 3 p.m.

SATURDAY, NOVEMBER 16.

Edinburgh Architectural Association.—Forenoon visit of Associate Section to Messrs. Redpath, Brown, & Co., Ltd.'s works, Easter-road. (2) Afternoon visits of whole Association to (1) New Masonic Hall, (2) New Hall of United Free Church of Scotland, 121, George-street.

COMPETITION NEWS.

A list of current Competitions is printed on page 559.

Church at Winton, near Manchester.

A competition has taken place recently for a new church (to hold 600) at Winton, in the parish of Worsley, near Manchester. The Assessor was Mr. W. D. Caröe, F.R.I.B.A., and the conditions were drawn up by him. The award is as follows:—First premium (15*l.*), Mr. R. T Beckett, A.R.I.B.A., of Chester; second premium (10*l.*), Mr. F. R. Freeman, of Bolton; third premium (5*l.*), Mr. F. P. Oakley, A.R.I.B.A., of Manchester.

Folkestone Band Pavilion.

At the last meeting of the Folkestone Town Council it was decided to erect a band pavilion on the leas and cliff, and to invite competitive designs for the structure, the maximum cost not to exceed 20,000*l.* Premiums of 100 guineas, 50 guineas, and 25 guineas, are to be offered for the designs placed first, second, and third by the assessor; but if any one of these three designs be adopted, the premium is to be merged into the architect's fees. Instructions were also given the Town Clerk to draw up the conditions of the competition. The appointment of a suitable Assessor has been left to the Mayor, the Deputy Mayor, and the Mayor-Elect.

Society of Architects' Studentship.

The Travelling Studentship of the Society of Architects (25*l.* and Silver Medal) will be awarded in 1913 for the best design for a group of almshouses. The conditions and a plan of the site are published in the November issue of the *Journal* of the Society.

BRITISH SCHOOL AT ROME.

THE following is the scheme of competition for the Scholarship in Decorative Painting at the British School at Rome, offered by the Commissioners for the Exhibition of 1851:—

The scholarship will be of the value of 200*l.* per annum, and will be ordinarily tenable for three years. Candidates must be British subjects, and less than thirty years of age on July 1, 1913.

The competition, which will be conducted by the Faculty of Painting of the British School at Rome, will be in two stages:—A. An open examination. B. A final competition, open to not more than four candidates selected from those competing in the open examination.

A. The Open Examination.—Competitors in this examination must submit the following works:—1. Not less than four drawings of the nude figure from the life. 2. One painting of a head and one painting of a figure from the life, in oil or tempera. 3. Two figure compositions in colour suitable for wall decoration (not larger than 30 in. by 22 in.). 4. Sketches of designs for decorative purposes, which should include some architectural studies.

B. The Final Competition.—This competition will be held in London from June 30 to August 23, 1913, and will be open to not more than four candidates selected from those competing in the open examination. The subject will consist of a design for a wall decoration, to fill a given space for a given purpose, and to a given scale. Eight weeks will be allowed for the execution of the design, and during that time candidates will be provided with studio accommodation and given an allowance of 2*l.* per week for models. The successful candidate in this competition will be recommended for appointment to the Commissioners' Scholarship.

The office of the British School at Rome is at 54, Victoria-street, London, S.W.

ARCHITECTURAL SOCIETIES.

Manchester Society of Architects.

At a meeting of the students of the Manchester Society of Architects, on November 6, Mr. Francis Jones, junr., in the chair, an interesting paper was read by Mr. Thomas Stott on "Tradition in Architecture." Mr. Stott traced the development of architecture on traditional lines, and strongly emphasised the necessity of a school free from all taint of passing fashions. During his remarks the lecturer pointed out that, apart from ecclesiastical architecture, the line of development was absolutely unbroken from the Greek, through the Roman and Italian Renaissance to the work of Jones and his immediate successors, and that it is desirable to continue this tradition in modern work. The conclusions of Mr. Stott, after a much animated discussion, were unanimously approved and carried by the meeting.

Royal Institute of the Architects of Ireland.

An ordinary meeting of the Council of this Institute was held at 31, South Frederick-street, Dublin, on Monday. The President Mr. A. E. Murray, R.H.A., F.R.I.B.A., occupied the chair. There were also present Messrs. R. Caulfeild Orpen, J. H. Webb, F. Batchelor, C. H. Ashworth, L. O'Callaghan, G. P. Sheridan, A. G. C. Millar, F. Hicks, F. Hayes, H. Allberry, W. Kaye-Parry, Professor Scott, and C. A. Owen, Hon. Secretary.

A great deal of correspondence was read and the House List of Officers and Council for the coming session was considered.

FIFTY YEARS AGO.

From the *Builder* of November 8, 1862.

Comfort for Pedestrians in Wet Weather. Is It Utopian?

IT has been asked, "Why not lay on hot air to warm our dwellings as well as gas to light them?" On my road to the City this week I could not but envy the dryness of the pavement in front of the bakers' shops, owing to the heat generated by their ovens. Pondering upon this, the thought struck me, if iron pipes could be laid down beneath the pavement, and supplied with heated air from furnaces erected at convenient distances, what a great comfort it would be during the winter months to pedestrians of all classes to have a dry pavement to walk on; what a saving in the wear and tear of boots, shoes, clothes, etc. How many doctors' bills would be saved, as well as the many valuable lives that are lost solely through disease brought on by damp feet. Last, though perhaps not least in this money-making age, what an enormous increase of custom our tradesmen would derive from the circumstance of the ladies—the "spending power" in the community—being enabled to go out "shopping" every day in the week, instead of, as now, only once or twice a week. Surely for all the advantages I have pointed out—comfort, health, and increase of trade—our householders would not object to being rated to pay the expense incurred. There is nothing impossible in sanitary reform, provided man will but use his inventive faculties properly and for the benefit of his fellows; and I am in hopes some of your readers may be able to reduce my "theory" into some practical utility, if you will kindly grant space in your columns for it. Is it Utopian, or have I found the germ of a sanitary truth, requiring only practical heads to bring it out?

*** We have been tempted to reprint this very human letter, since it gives such able expression to the sentiments of those whose walks abroad take them over pavements greasy with a compound of fog and moisture peculiar to this season of the year. The appeal elicited no response, and we have by this time ceased to hope. Our correspondent of fifty years since is virtually pleading the cause of the street colonnade.—ED.

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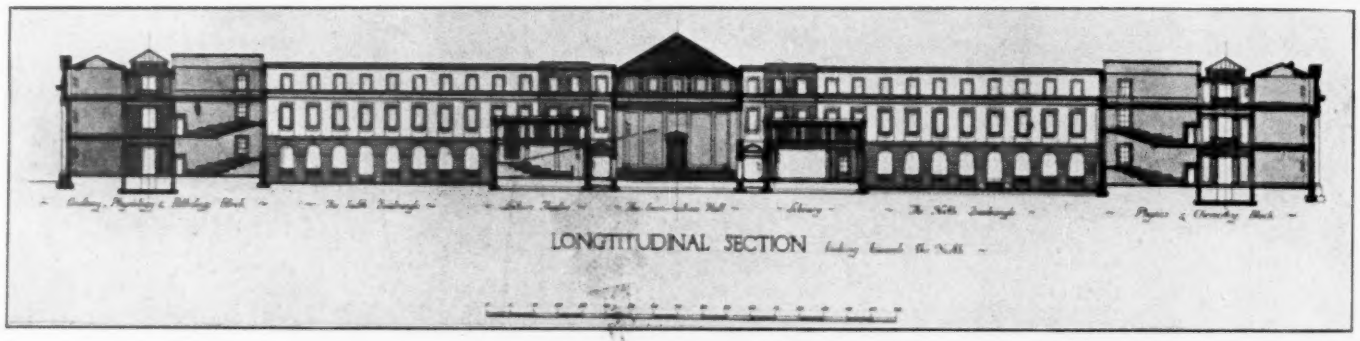
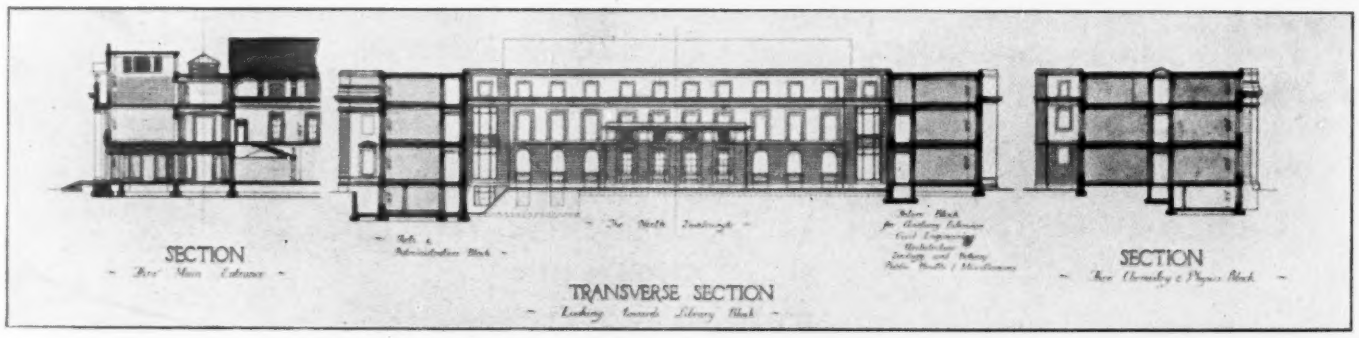
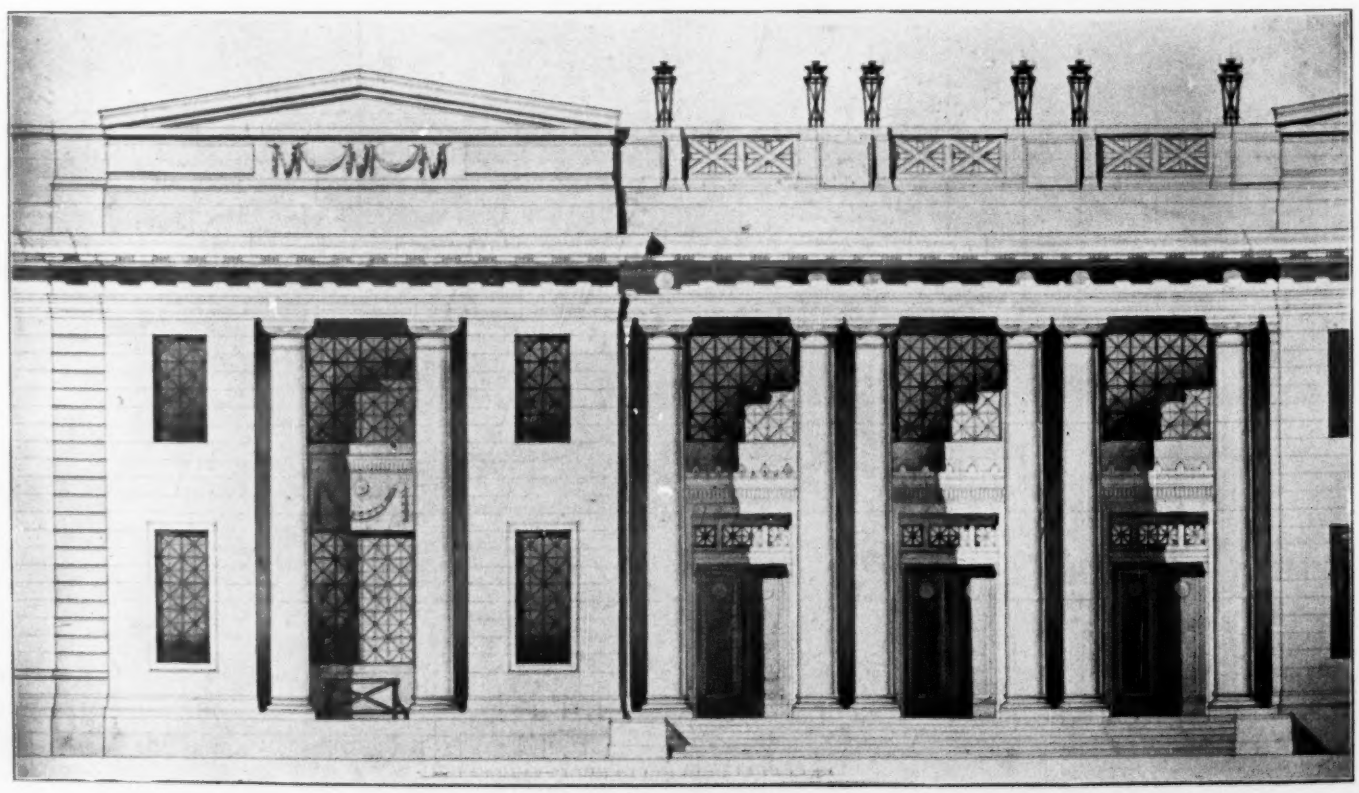


LONGITUDINAL SECTION looking towards the North



TRANSVERSE SECTION
looking towards Library Block



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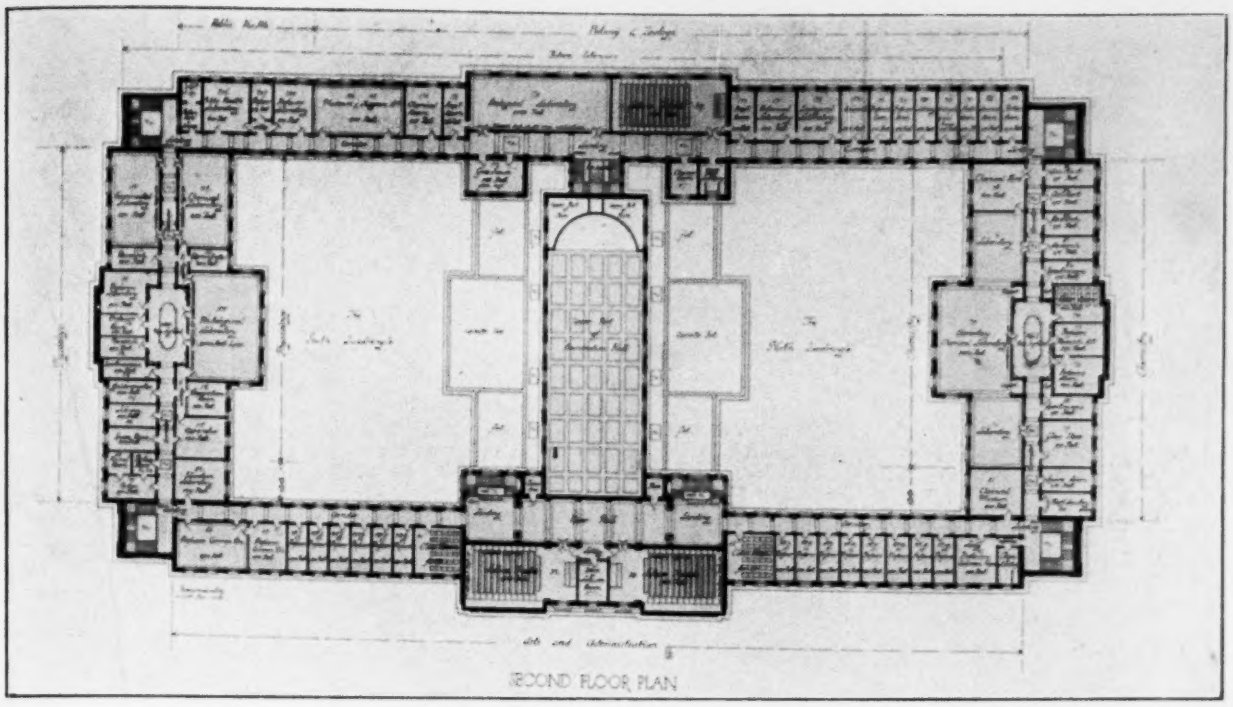
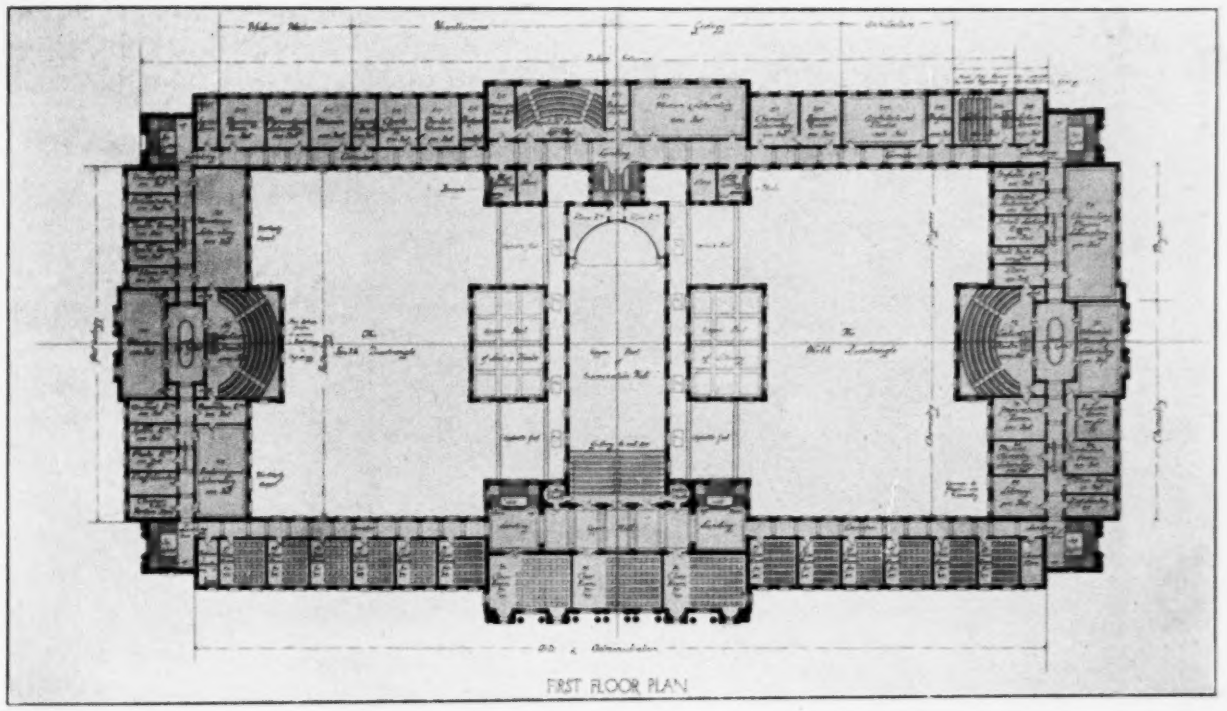
UNIVERSITY COLLEGE, DUBLIN. PROPOSED NEW BUILDINGS.—ACCEPTED DESIGN BY MESSRS. DOOLIN & BUTLER



SECOND FLOOR PLAN



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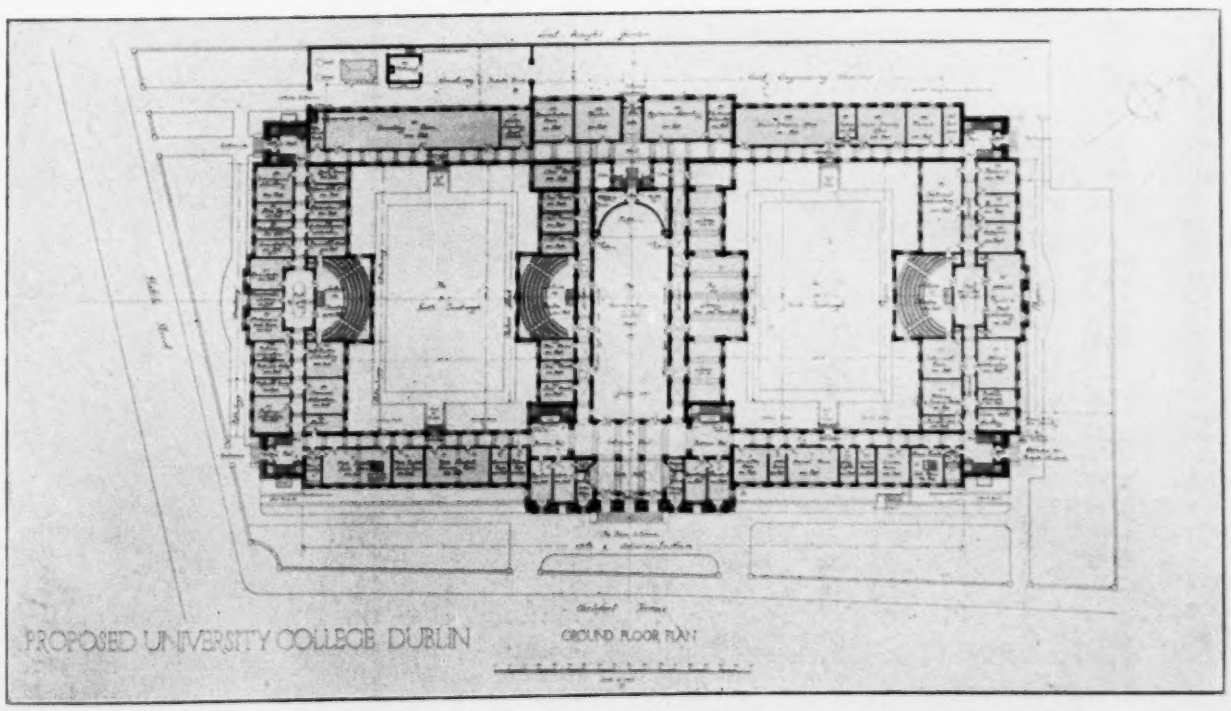

PROPOSED UNIVERSITY COLLEGE DUBLIN

GROUND FLOOR PLAN

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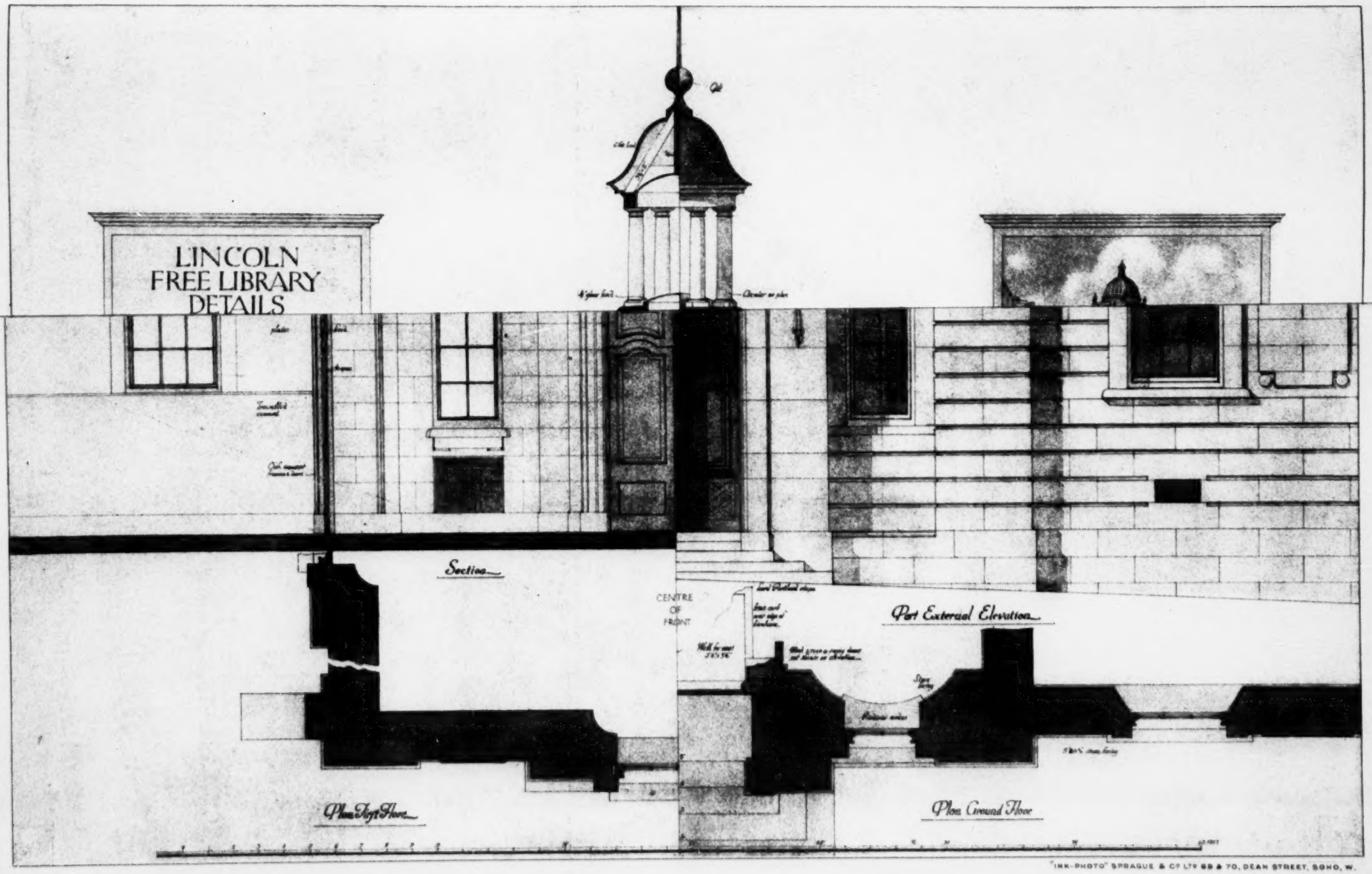
UNIVERSITY COLLEGE, DUBLIN. PROPOSED NEW BUILDINGS.—ACCEPTED DESIGN BY MESSRS. DOOLIN & BUTLER.



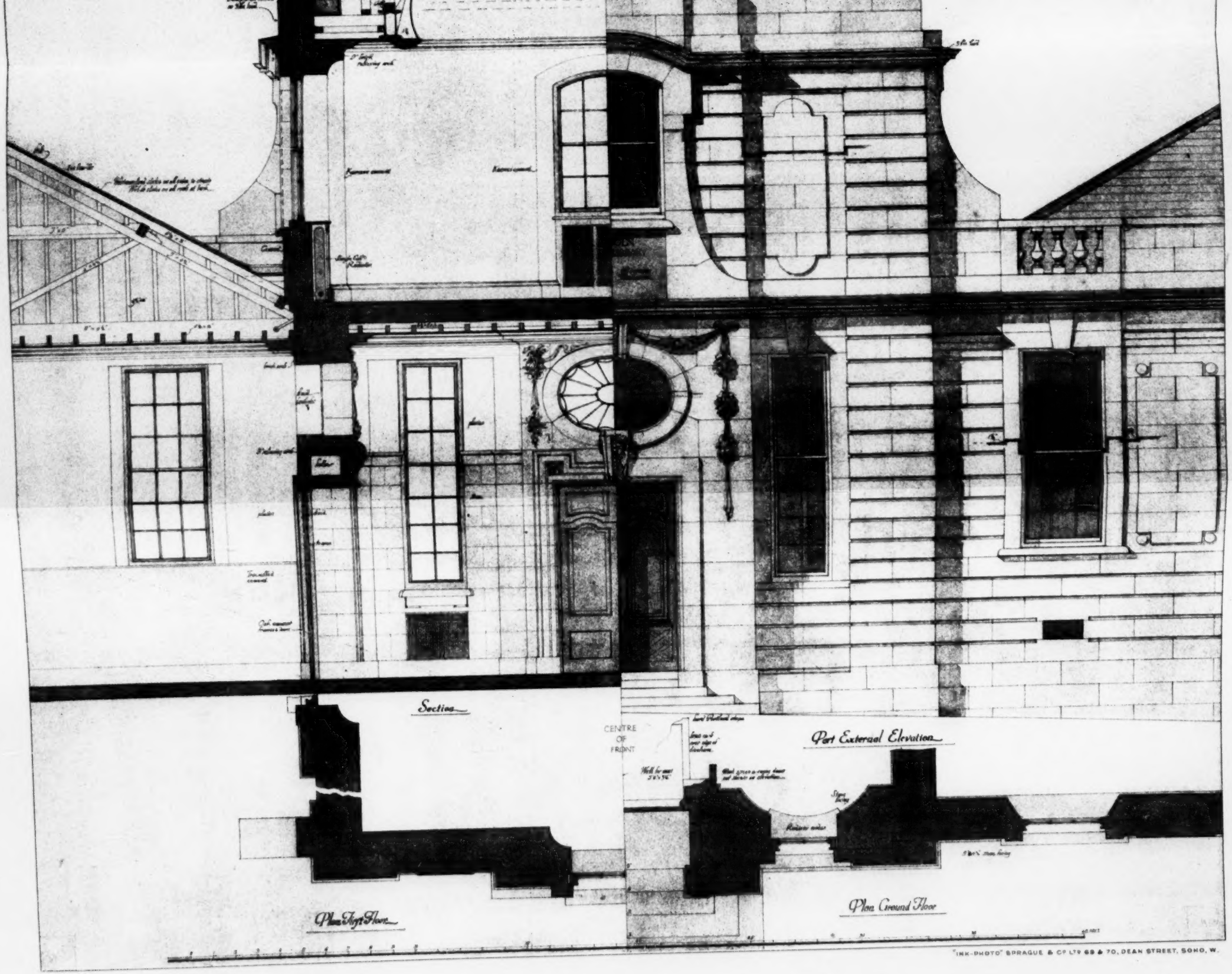
"INK-PHOTO" SPRAGUE & Co LTD 69 & 70, DEAN STREET, SOHO, W.

LINCOLN FREE LIBRARY.—Mr. Reginald Blomfield, A.R.A., P.R.I.B.A., Architect.

(Royal Academy Exhibition, 1912.)

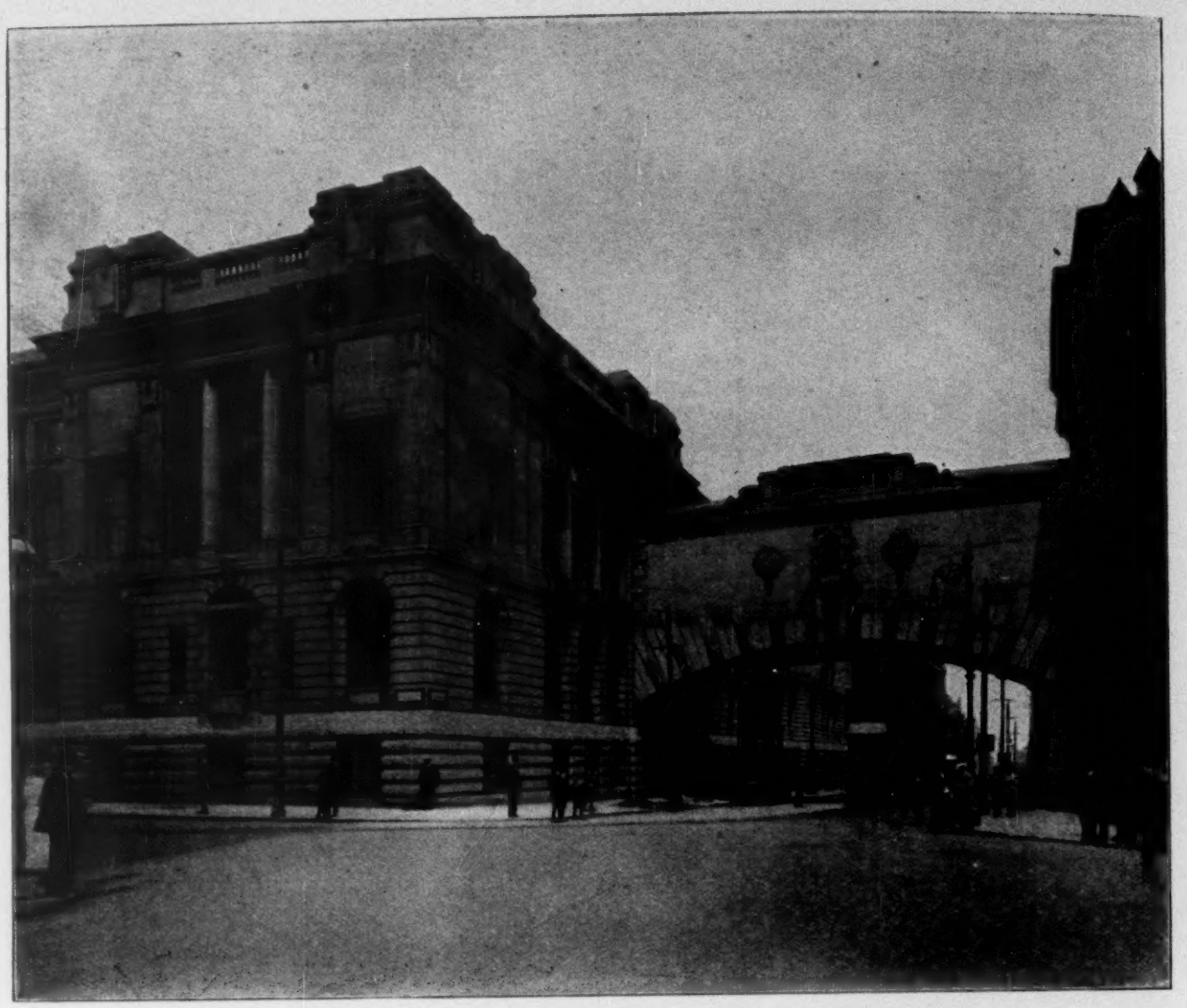
LINCOLN FREE LIBRARY DETAILS

Reginald Blomfield A.R.A.
Architect


Section
CENTRE OF FRONT
Part External Elevation
Plan First Floor
Plan Ground Floor
"INK-PHOTO" SPRAGUE & Co LTD 69 & 70, DEAN STREET, SOHO, W.

LINCOLN FREE LIBRARY.—Mr. Reginald Blomfield, A.R.A., P.R.I.B.A., Architect.

(Royal Academy Exhibition, 1912.)



BRIDGE AT JUNCTION OF EDMUND STREET AND CONGREVE STREET.

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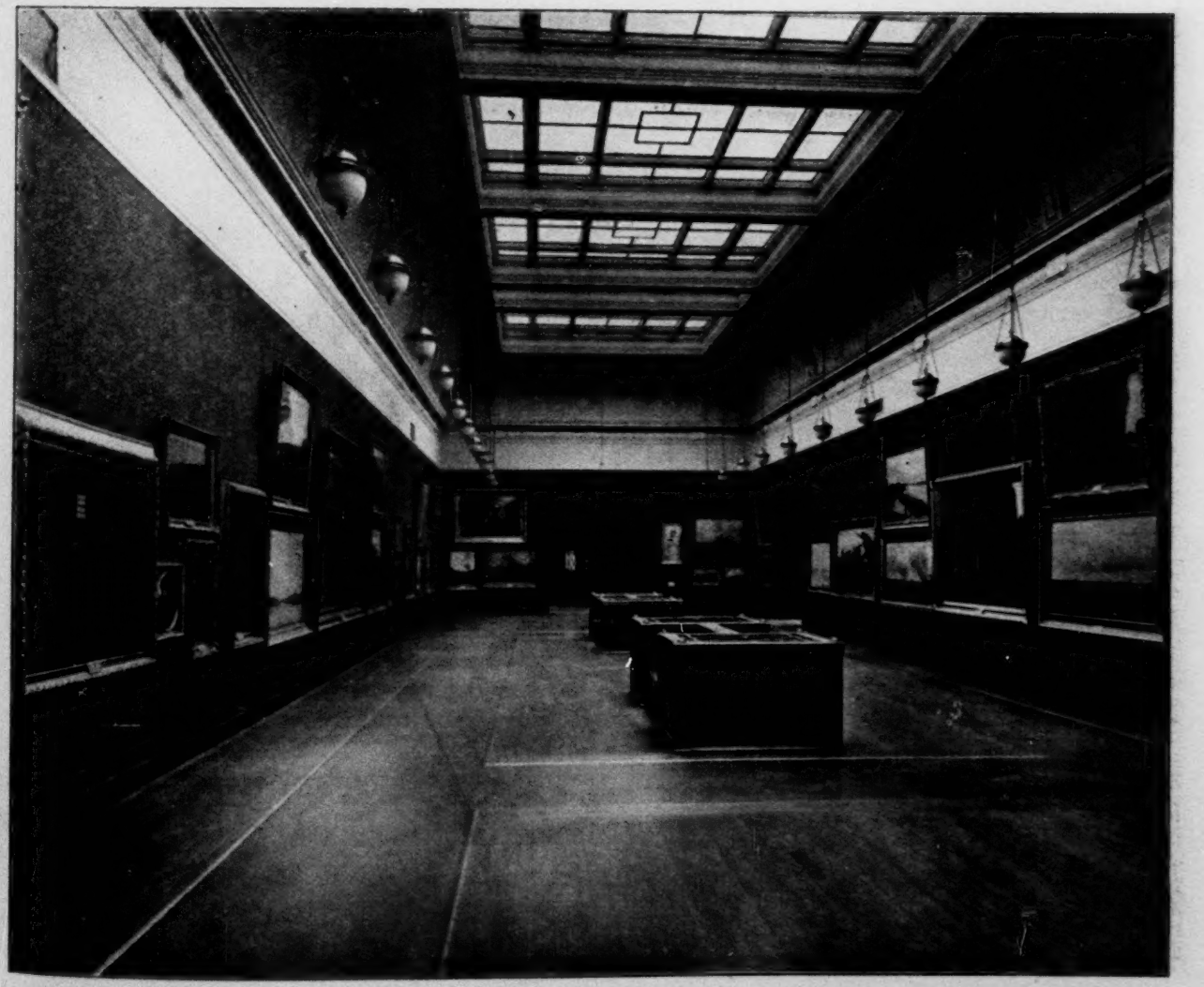
FRONTAGE TO EDMUND STREET: GAS DEPARTMENT ENTRANCE.

BIRMINGHAM COUNCIL HOUSE EXTENSION.—Messrs. H. V. As

GAS DEPARTMENT, RATES OFFICE.



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INTERIOR OF ONE OF THE ART GALLERIES.

NSION.—Messrs. H. V. Ashley & Winton Newman, Architects.

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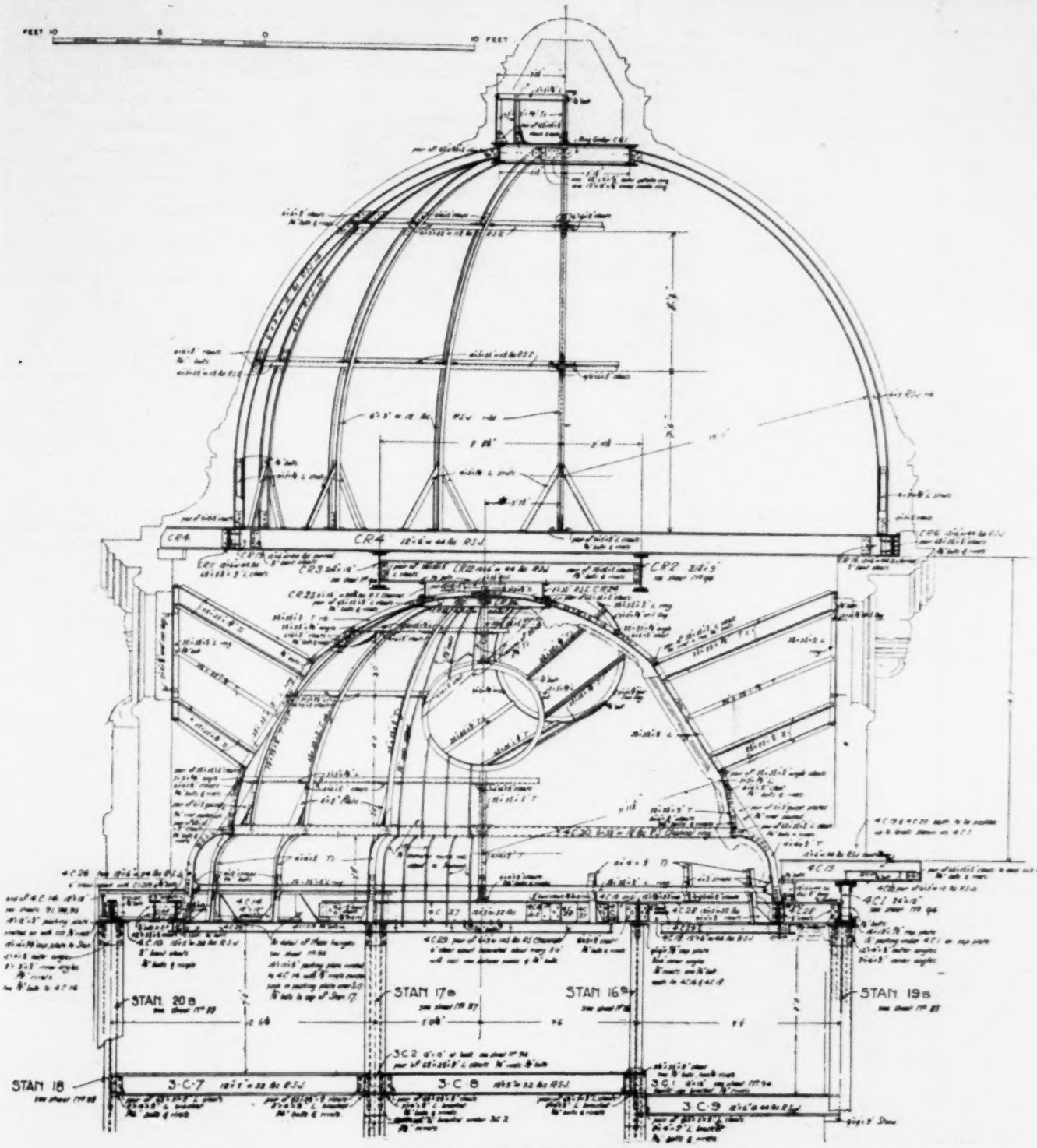


Birmingham Council House Extension.

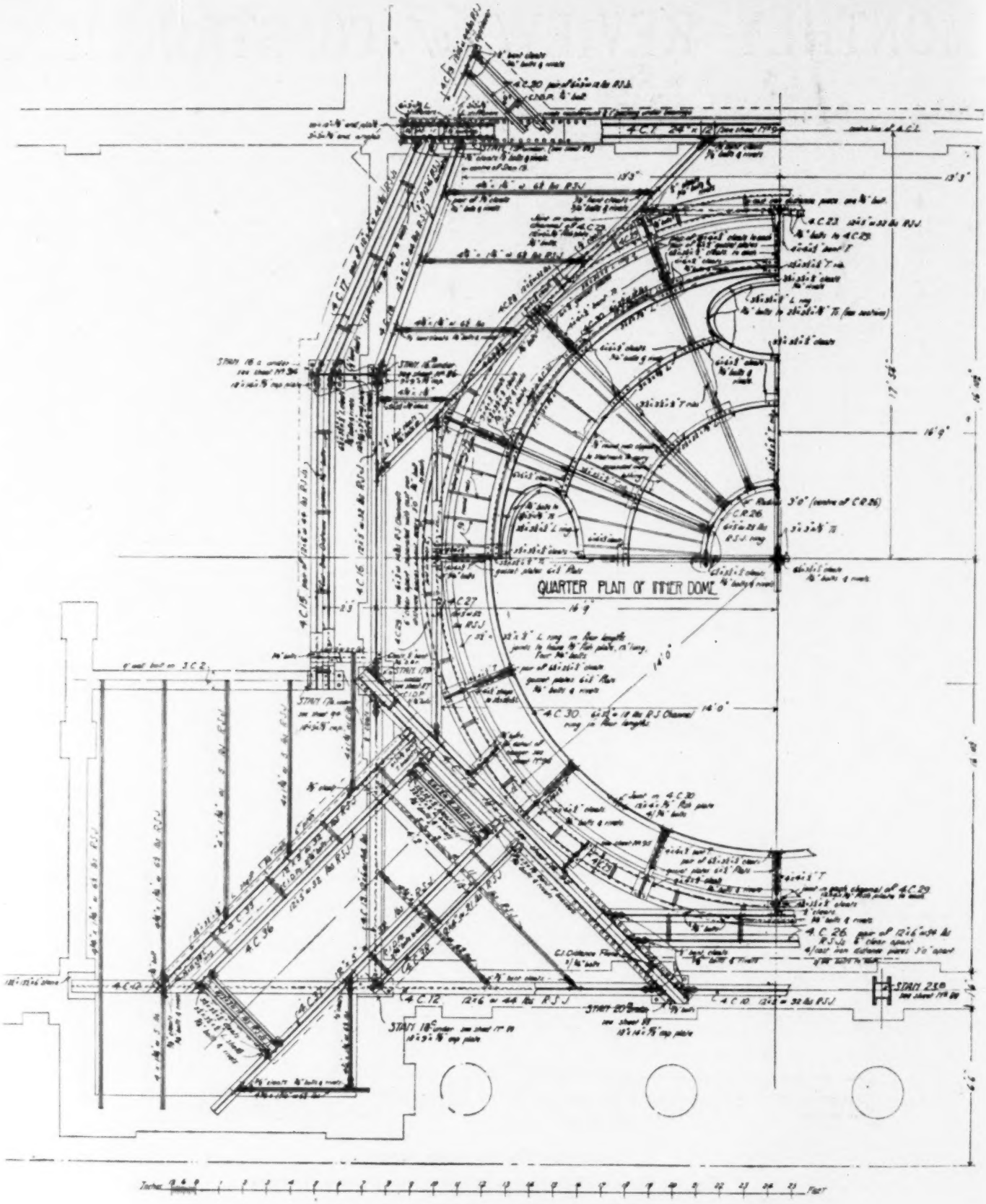
Fig. 1. Section of Steelwork in Dome over Central Museum.

BIRMINGHAM COUNCIL HOUSE EXTENSIONS.

THESE buildings are situated on a rectangular site surrounded by streets, and are connected with the Council House by a bridged approach joining the new and old galleries. The main accommodation is of a utilitarian character, consisting of offices for several of the great municipal departments, each of which is planned in a self-contained manner with separate access from outside, internal communication being provided for heads of departments by means of pass doors. As will be remembered, the planning of the scheme provided a difficult problem, which was very ably solved by Messrs. H. V. Ashley & Winton Newman, whose design is architecturally sober and dignified. The problem of lighting the various rooms and galleries has been well thought out, with a good result, on which we think the city may be congratulated. The rear part of the site, left for future extension, has been occupied by extensions carried out under the same architects, which provide for the needs of the newly incorporated "Greater Birmingham."

The extensions to the Birmingham Council House were commenced in the early part of 1908. The building occupies an island site, about 320 ft. by 270 ft., to the north of the Council House and Corporation Art Galleries, and is bordered by Congreve-street, Great Charles-street, Margaret-street, and Edmund-street, the last-named thoroughfare being spanned by a masonry bridge that connects the old galleries with the new. Unfortunately, the surrounding streets are somewhat narrow, so that, with the exception of the angle view of the building from Chamberlain-square, it is difficult to realise fully the extent and scale of the work. In this connexion we may say that the perspective view of the building exhibited a few years ago, when the design was selected in competition, gave a more favourable representation of the main façade to Congreve-street than it is possible to obtain in reality, for the artist's viewpoint was not embarrassed by taking account of the block of office premises on the opposite side of the street. This drawing was reproduced in the *Builder* of January 19, 1907.

Accommodation had to be provided in the building for four municipal departments and a series of art galleries and museums, the cost of the latter having been covered by a bequest of the late Mr. John Feeney. In the disposition of the plan the art galleries and the large rates office in the Gas Department were the governing factors. The former were required at the level of the art galleries in the old building, with a connecting bridge across Edmund-street of sufficient width and



Birmingham Council House Extension.

Fig. 2. Details of Steelwork in Dome over Central Museum.

internal size to form a gallery in itself, while the large rates office had of necessity to be easily accessible from the street. These two conditions had been met by placing the rates office toward the centre of the block and grouping the galleries around and partially over it, lighting the office from internal courtyards some 40 ft. wide, and by a large top light in addition. This, in execution, has worked out most satisfactorily. Another factor of considerable influence on the plan was the fall in the site from west to east. This necessitated very careful consideration of floor levels, a solution having been found by taking the old art gallery floor as the datum for the new galleries, and also for the first floor level throughout the building, and taking the centre of Margaret-street front as the datum of the lower ground floor, and dividing the height between these two levels into two floors, thus obtaining a lower ground and an upper ground floor. The level of the upper ground floor on the Congreve-street side finishes about 6 ft. above pavement level on account of the fall in the site, and consequently the entrance porches on that front come at the half-landing level.

Minor influences on the plan have been the disposition of future extensions and the planning of departments as complete in themselves; that is to say, each department has its own entrance from the street, and its only access to other departments is by means of pass doors in the corridors, which are kept locked, and are only used by head officials holding master-keys.

The municipal departments accommodation in the building are, in addition to the art galleries and Gas Department already mentioned, the Education Department, which occupies the whole of the Margaret-street frontage on all four floors; the Tramways Department, which occupies three floors on the northern half of the Congreve-street frontage; and the Health Department, which occupies three floors on the southern half of the same frontage. The remainder of the building is occupied by the art galleries and museums on the first and second floors, and by the Gas Department on the upper and lower ground floors.

In addition, there is a second extension now about to be commenced, which provides for the completion of the series of art galleries

as shown on the plans, with a connecting-link at the northern end in the form of galleries for casts, with balconies around, and a principal staircase and entrance from Great Charles-street; otherwise the only entrance to the galleries at present is by the staircase on the other side of Edmund-street, through the old galleries, and over the new bridge. Cast galleries also connect at the north-west end with the series of natural history museums that will extend the whole length of the Congreve-street frontage on the second floor. The southern end of these museums is connected by a marble staircase with the new art gallery hall.

The second extension also provides additional accommodation (rendered necessary by the Greater Birmingham scheme) for the Tramways, Health, and Gas Departments on the lower and upper ground floors, as well as a patent library at the northern end with entrance from Great Charles-street.

Access to the various courtyards within the building is obtained through one large gateway in Margaret-street, under close supervision from the gate-keeper's office adjoining.

In the general construction of the building no special reinforced concrete methods have been adopted, but the steel joists and stanchions throughout are encased in concrete.

The walling has been built with Black Country bricks in cement, with Birmingham bricks internally where plastering occurs, and the whole of the internal courtyards have been faced with white glazed bricks, relieved with salt-glazed dado and dressings and green bands. The external frontages to the streets have been finished with a heavily-rusticated base of Aberdeen granite to the level of the upper ground floor, and above this level in Darley Dale stone. This stone was used in the present Council House, and in selecting the same material the architects worked under definite instructions.

It may be mentioned that no great difficulties were encountered with the foundations, which are taken down to below the level of the foundations of the old houses that originally occupied the site. Numerous disused wells were discovered, which necessitated in many cases steel grillages and concrete, but otherwise the concrete foundations rest upon a good gravelly loam.

The first extension now completed includes some interesting steelwork, the most important items being in the dome over the central museum on the Congreve-street frontage, the roofing for the loan and art galleries, and the new bridge over Edmund-street.

We give in Fig. 1 a sectional elevation of the steelwork in the dome, which includes an outer dome of 31 ft. 3 in. diameter, and an inner dome of 24 ft. 3 in. diameter. This drawing shows the steel ribs of the domes and the manner in which the latter are supported by stanchions and girders. It also indicates in outline the masonry drum and sheathing of the outer dome.

The steelwork carrying the masonry drum is further illustrated by the half plan in Fig. 2, where also will be found a quarter plan of the inner dome.

The outer dome is carried by steel framing, of which a half plan is given in Fig. 3, this drawing also including a half plan of the dome from the top. As these illustrations are fully lettered and figured it is unnecessary to enter into detailed particulars of the construction, which is very clearly shown by the drawings themselves.

The roofing of the art galleries is illustrated by the photograph reproduced as one of our Plates, typical sections of the steelwork being given in Figs. 4 and 5.

The loan art gallery roof has a clear span of 43 ft., and is carried by trusses, of which details are reproduced in Fig. 4, the lower drawing in the same illustration being an elevation of the steelwork in the gable end. The central portion of the roof is provided with patent glazing, giving ample light to the interior of the gallery, and the side portions are covered with concrete, over which slates are laid.

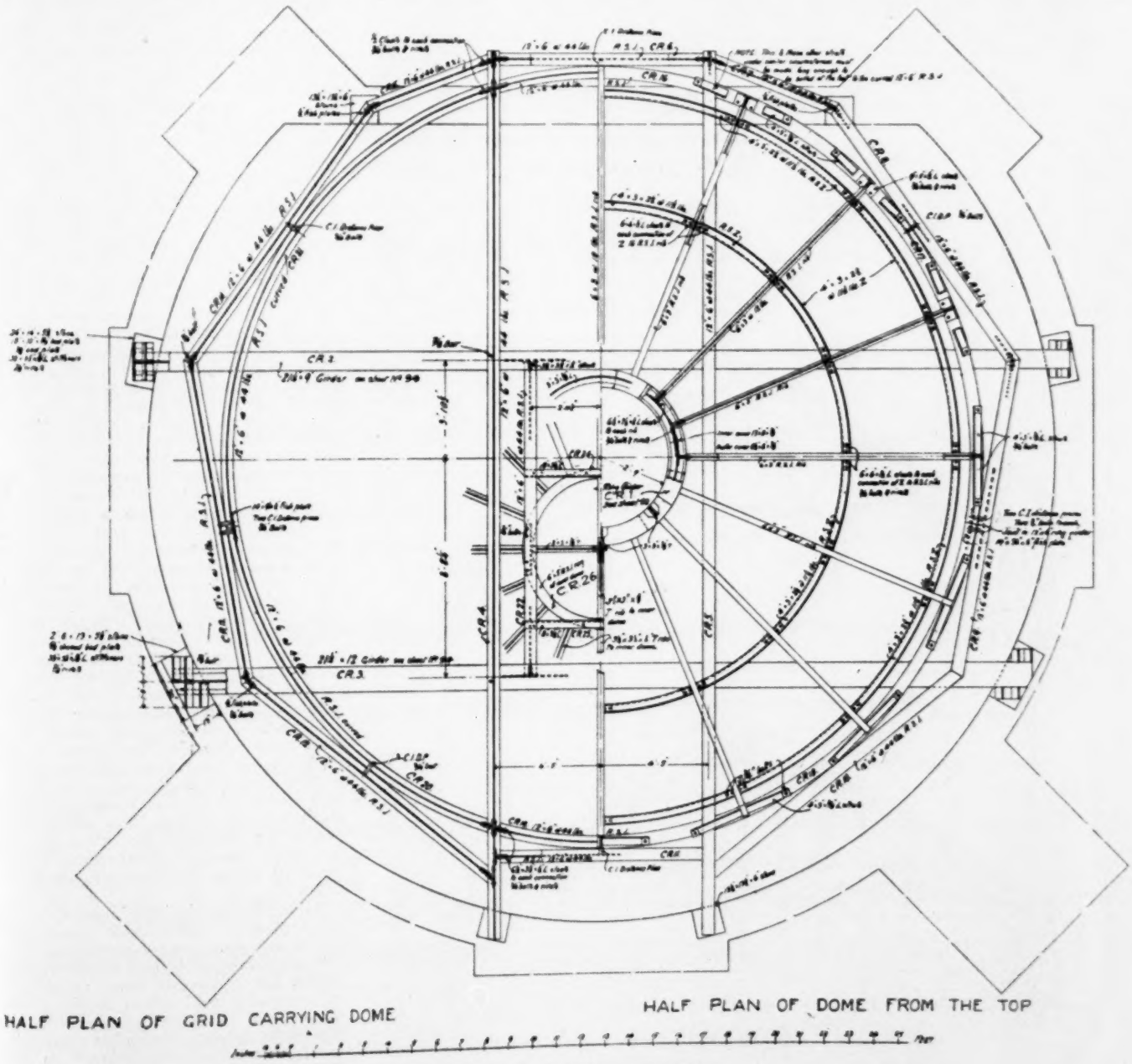
The modern art gallery measures 33 ft. from wall to wall, and the roof is carried by two types of trusses, A and B respectively, as represented by the elevation in Fig. 5.

The bridge connecting the new and old buildings, and passing over Edmund-street, as represented by one of the photographs reproduced in our Plate, is a steel-framed structure sheathed in masonry.

The bridge has a span of 64 ft. 9 in., and is 22 ft. 6 in. wide over all. It is essentially a bridge of the tubular type, formed by two longitudinal main girders, connected at the bottom by transverse girders and other members of the floor framing, and connected at the top by steel roof trusses and framing.

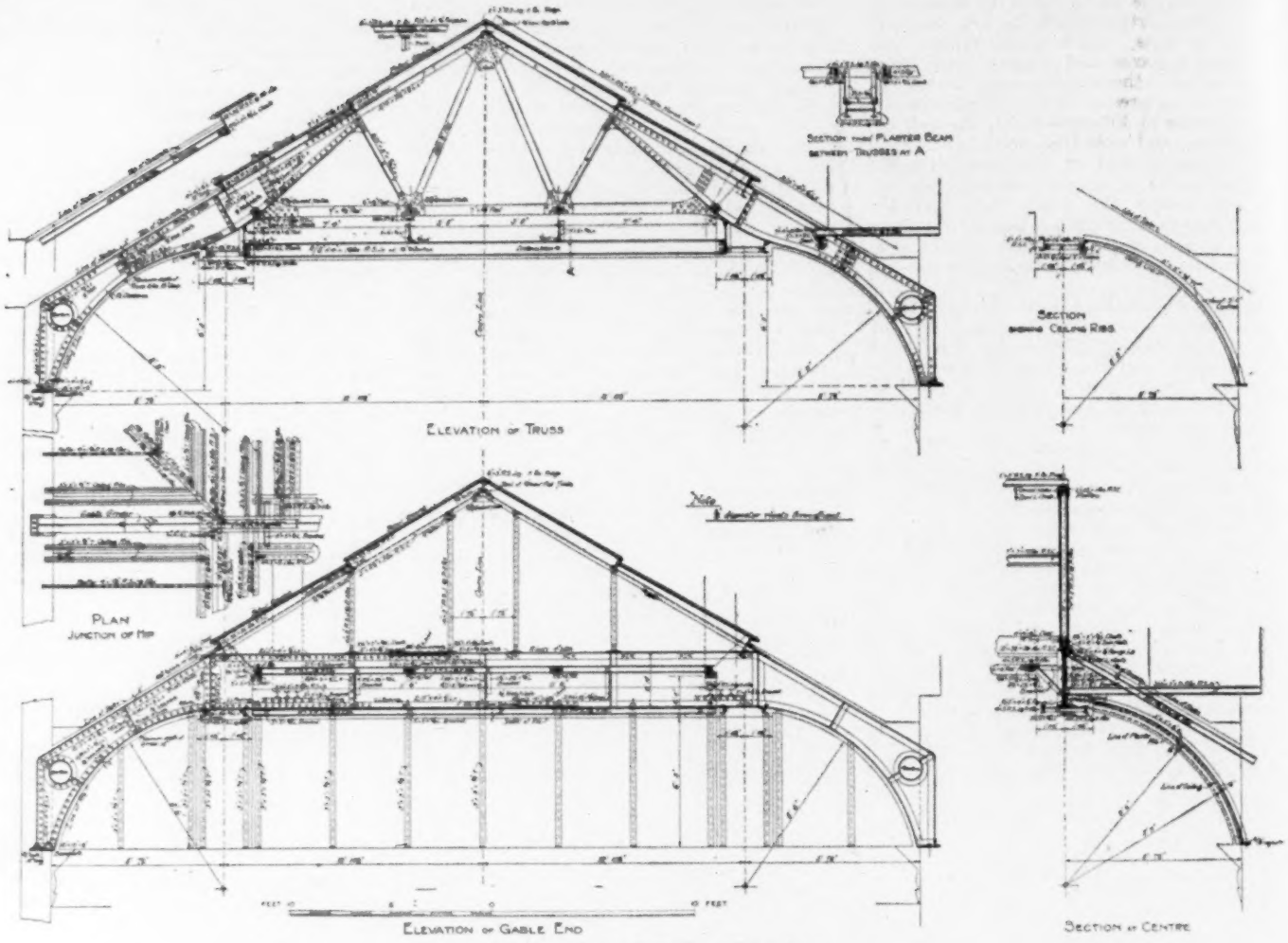
Cramps are attached to the two main girders for supporting the masonry sheathing, and the masonry arch ribs on the undersides are carried by steel ribs.

The interior of the structure is 18 ft. 9 in. wide by 17 ft. 6 in. high, and forms one of



Birmingham Council House Extension.

Fig. 3. Details of Steelwork in Dome over Central Museum.



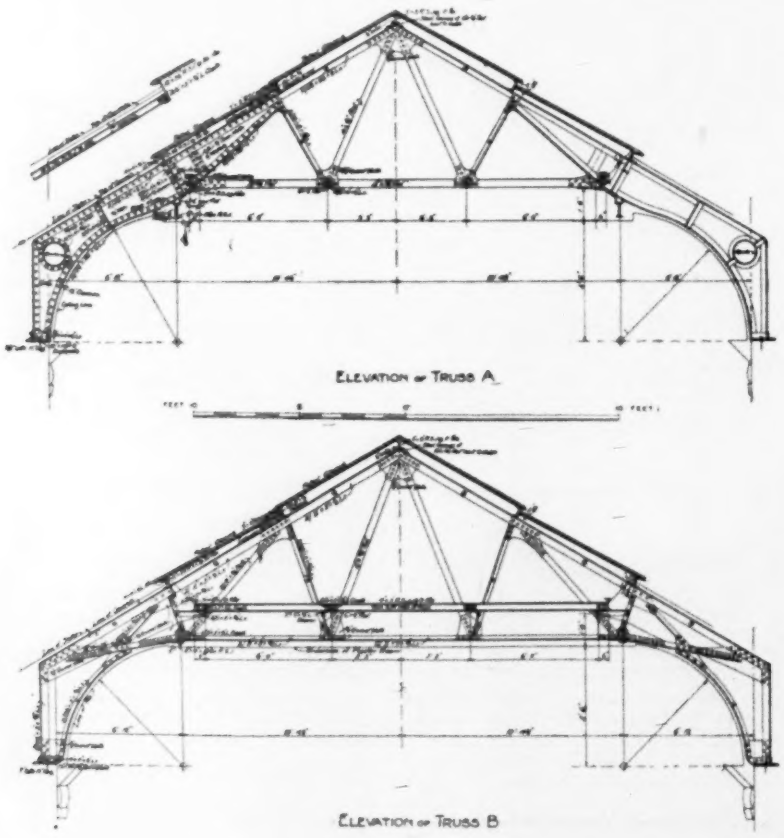
Birmingham Council House Extension.

Fig. 4. Steelwork in Loan Art Gallery Roof.

the series of art galleries, the walls being unbroken by windows, and the roof suitably glazed.

Fig. 6 includes a half plan of the floor framing, a half plan of the roof framing showing the wind bracing, and a half plan of the framing for support of the ceiling.

Section line A-A in the plan serves as an index to the sectional elevation of the main girder in Fig. 7. The two members of this type are 16 ft. 6 in. deep, and beneath them are the inner ribs, one, denoted by section line B-B in Fig. 6, carrying the masonry arches added for architectural effect. The steel ribs were fixed simultaneously with the arch stone, as may be seen by reference to the general view of the steel framing in Fig. 8.



Birmingham Council House Extension.

Fig. 5. Steelwork in Modern Art Gallery Roof.

Fig. 9 is a cross-section of the bridge on line D-D (Fig. 6) representing one of the six connecting roof trusses of type A, and showing in outline the masonry sheathing and interior architectural treatment. The ribs and stonework of the arches beneath are also indicated in detail. The two remaining roof trusses are of type B, these being on either side of the centreline, and generally similar to those of type A, but of lighter construction.

The heating of the building is effected by means of ventilating radiators and low-pressure hot water (accelerated by motor-driven pumps) supplied from two large boilers. The boiler-house is situated below the ground level in the centre of the site, occupying the greater portion of the court-yard at the northern end of the large rates office, and accommodation has been provided for a third boiler required for the second extension. Ventilation is effected by means of exhaust ducts above the barrel ceilings of the corridors, with connexions to the various rooms and upcast shafts leading to powerful fans that discharge above the roof levels. The art galleries have separate fans in the gable-ends above the inner lights, and the large rates office also has a separate system of vertical and horizontal exhaust ducts connecting with a central fan, which drives the foul air up the shaft surrounding the smoke-stack from the boilers. The art galleries are heated by radiators placed in the centre between the seats, fresh air being brought to them by means of horizontal ducts in the floors.

As to the interior finishings and fittings, apart from the art galleries and approaches, the departmental entrance-hall and staircase, the large rates office, and various committee-rooms, the building is made up of a series of large and small offices requiring nothing more than plain and simple finishings. Naturally the art galleries have received very careful attention, particularly as regards lighting, both natural and artificial. In the present case the method adopted comprises an outer roof light of as large an area as possible, and an inner glazed light, both in

proper and scientific relation to one another and the picture plane. The ceiling is coved all round, finishing at the walls with cornice, frieze, and architrave, and horizontal sun-blinds are fitted above the inner grids.

For the artificial electric lighting of the galleries a system of metallic filament lamps enclosed in ground-glass bowls with mirror reflectors over, contained and carried by a bronze rim and chains, has been adopted, and the resulting illumination is most pleasing and satisfactory. This system was arrived at after many different experiments of an expensive nature.

All the gallery floors are of oak, with gangways around in brown linoleum, 4 ft. wide and about 5 ft. away from the walls. This method of deadening the sound of the constant traffic has been found most successful at the Glasgow Galleries, and is of special use in the present instance on account of the rooms below being used as offices; it also gives visitors a guide as to the position for properly examining pictures of ordinary size hung at about eye level.

The galleries have been finished in as restrained a manner as possible, with little architectural treatment beyond the cove and cornice, etc., already mentioned, a low mahogany dado all round, and Ashburton marble architraves to the doorways, thus confining the interest to the pictures and leaving them to provide a general decorative effect.

The new bridge and the art gallery-hall have been treated with rather more freedom. The floors are finished in marble, Hopton Wood stone, and mosaic, and Swedish green marble columns support the ceiling of the hall, while an alabaster staircase leads to the natural history museums on the top floor. The columns and entablature and the ceiling to the bridge are all finished white, providing an excellent foil to the Burne-Jones tapestries between the columns.

The natural history museums are carried out very simply in white and grey, with a curved top-lighted ceiling over the main span. The central museum beneath the dome on the Congreve-street frontage has been treated as a domed room, with supporting Ionic columns, all in creamy-white. It may be noted that this series of museums has been constructed so as to be easily converted into additional departmental offices should they be ultimately required.

Apart from the art galleries, the department providing most scope for effect has been the Gas Department, with its entrance-hall, large rates office, and committee-rooms. The entrance-hall has been finished in Hopton Wood stone and marble, with plaster panels and columns and enriched plaster cornices and ceiling panels. Leading direct out of the entrance-hall to the right is the private corridor with its suites of private rooms; to the left is the large fitting showroom; and straight ahead is the main rates office. The last named has been panelled and fitted in oak throughout, with wall surfaces above in plaster, and a decorative plaster treatment for the ceiling panels and the large barrel toplight in the centre of the office, the floor of the public space being laid with marble and mosaic.

The principal rooms leading out of the private corridor are the committee-room, chairman's room, and secretary's room, all of which have been finished with oak panelling, marble fireplaces, and decorative plaster ceilings.

The floor areas below these offices are occupied by stores and additional offices in connexion with the departments, access to the stores-yard being obtained from the cart-way entrance in Margaret-street already mentioned.

The whole of the lighting of the Gas Department is by low-pressure gas, with the exception of the large pendants in the rates office and the entrance-hall, for which high-pressure gas has been adopted. All the fittings are executed in bronze from designs by the architects in conjunction with the Gas Department, and some measure of success has been obtained in embodying the latest methods of lighting control by pneumatic tube, etc., without the unsightliness usually associated with such fittings. The external lighting of the building on the street frontages is also by means of high-pressure gas burners; otherwise the building internally is electrically lighted.

The rooms of the remaining departments do not call for special notice beyond the statement that the committee-rooms in connexion with them have been finished with oak dados and plaster panels and decorative plaster ceilings.

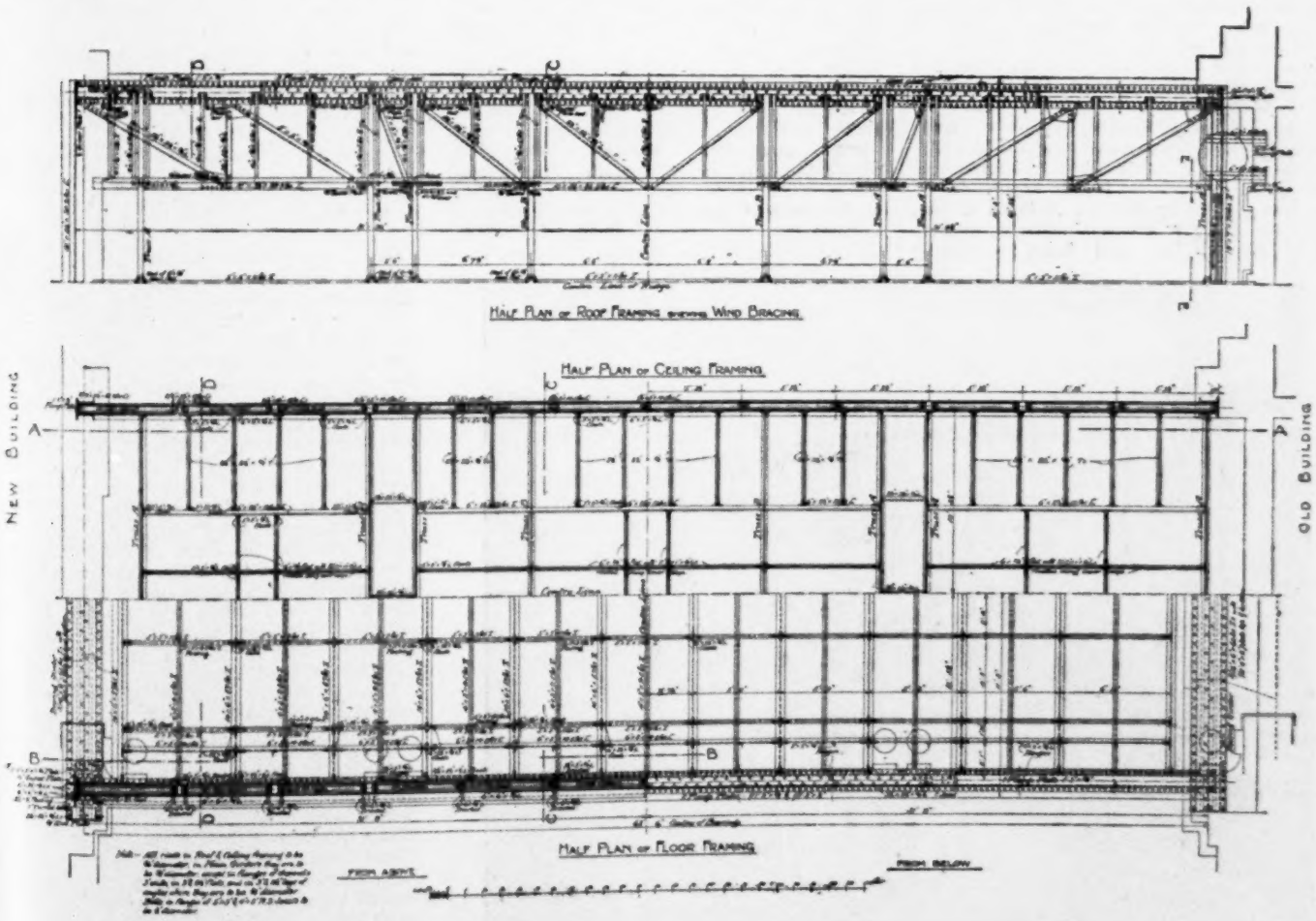
The principal staircases have Echaillon treads and risers, marble dados with large panels over, and wrought-iron balustrades.

It is worth noting that the floors of the main corridors throughout the building have been finished with linoleum panels with Echaillon marble surrounds, in order to deaden the noise and reverberation usually so noticeable in a building of this character. The majority of the ordinary offices are also finished with linoleum laid on a cement screed direct on the concrete.

The whole of the fittings and furniture, including the chairs, have been executed in Austrian oak, with the exception of the plainer fittings in the stores and similar rooms, where deal has been employed, and in special cases in the Gas Department stores, where wrought-iron racks and hangers have been rendered necessary by reason of the heavy materials to be accommodated. These fittings have all been executed from designs by the architects to the special requirements of the departments concerned, and in this way an effect of fitness and uniformity has been secured throughout the building.

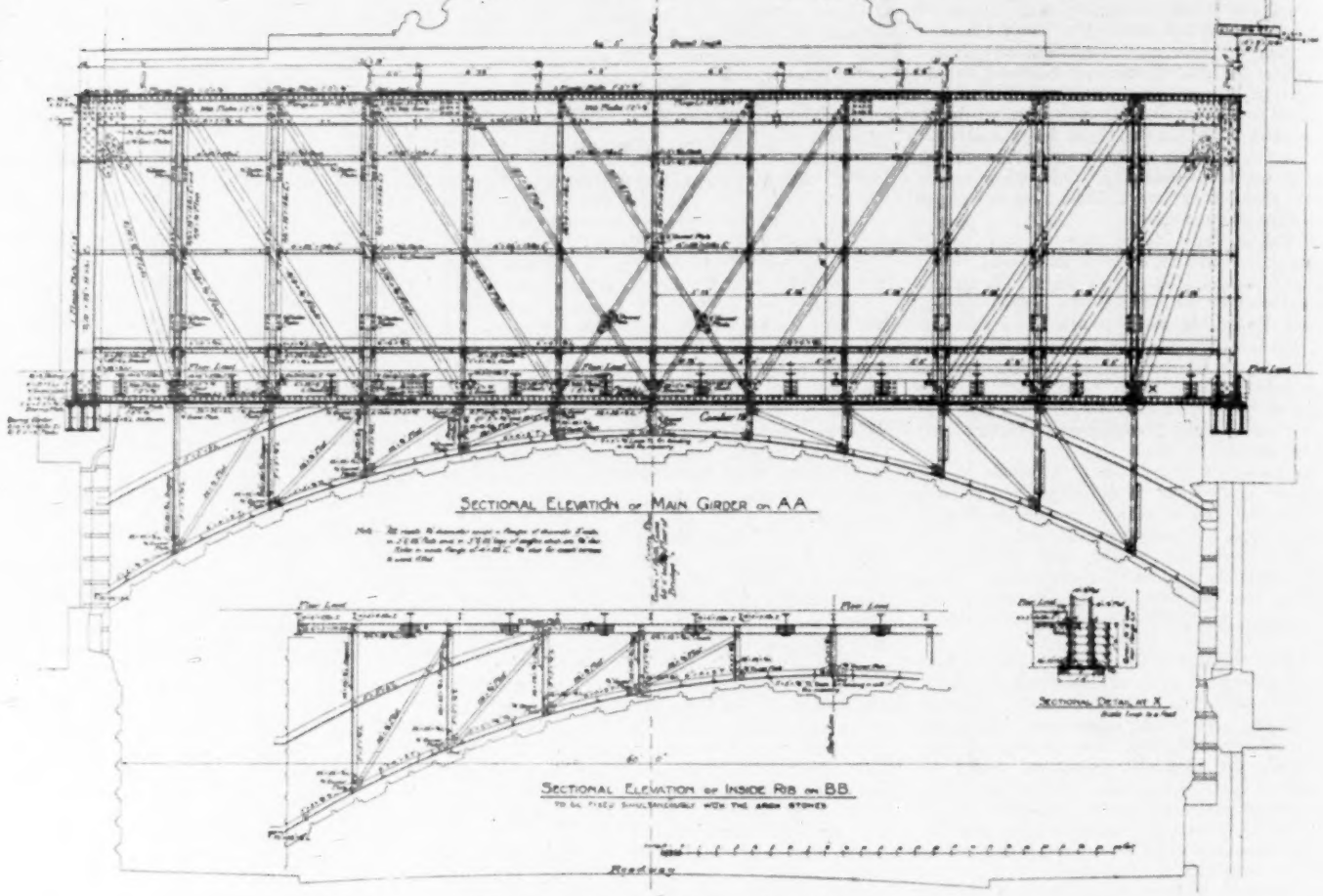
The general contractors were Mr. Thomas Rowbotham, Birmingham, for the first portion of the contract, and the Building Construction Company, Ltd., London, for the remainder. The steelwork engineers were Messrs. Whitaker, Hall, & Owen, and the consulting engineer was Mr. W. M. Binney. The plaster-work was executed by Mr. G. P. Bankart, Mr. L. A. Turner, and Messrs. A. & S. Wheater, and the stone-carving by Mr. W. B. Fagan and the Bromsgrove Guild. Wall and floor tiling was supplied by Messrs. Carter & Co., Ltd.; sanitary fittings by Messrs. Doulton & Co. and Messrs. Shanks & Co.; exterior iron balconies, standard and bracket lamps, interior iron balustrading, bronze window-grilles and door furniture, and bronze electric-light fittings by the Birmingham Guild, Ltd.; and permanent furniture by Messrs. Cubitt & Co. and Messrs. John Barnsley & Son.

The stone for the Council House was supplied by the Stancliffe Estates Company, Ltd.,



Birmingham Council House Extension.

Fig. 6. Steelwork in Bridge over Edmund-street.



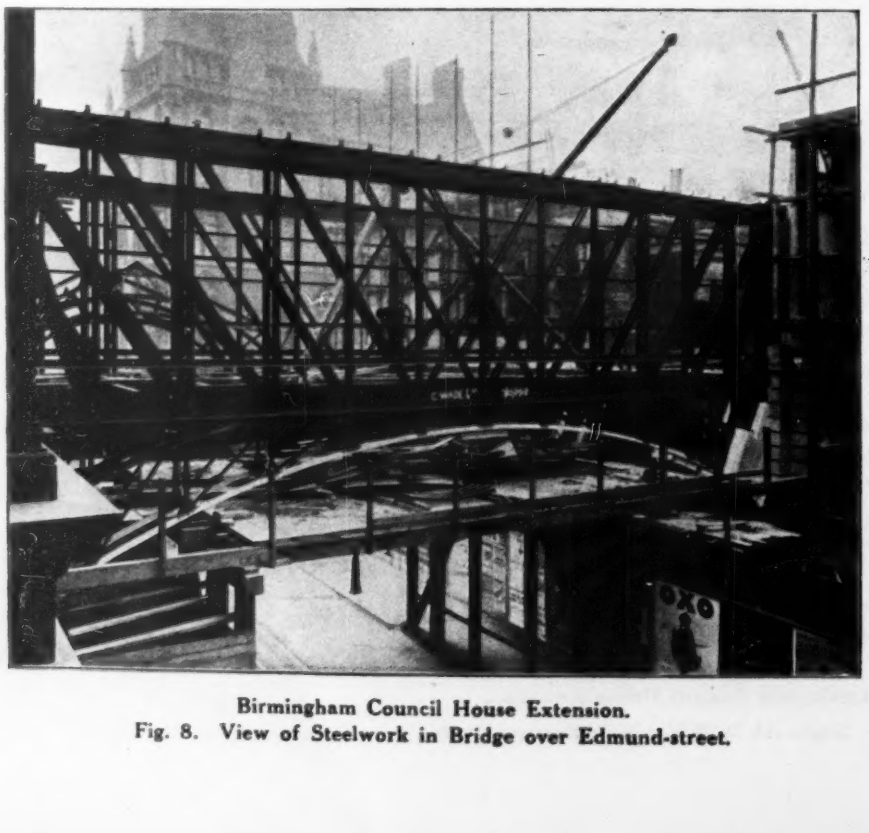
Birmingham Council House Extension.

Fig. 7. Steelwork in Bridge over Edmund-street.

of Darley Dale, who are the proprietors of the original Darley Dale quarries. The total quantity of Stanclife Darley Dale stone used in the construction of the old Council House and art gallery was about 80,000 cubic ft., and for the extensions the quantity supplied was approximately 90,000 cubic ft., delivered over a period of eighteen months. We may add that St. George's Hall, Liverpool, was built out of this stone.

Messrs. Chance Brothers & Co., Ltd., specially manufactured the glass for the sky-lights, which is extra white, double-rolled cast glass, and about 30,000 super. ft. of this was glazed by Messrs. Mellows & Co., Ltd., on their "Eclipse" patent system, which ensures the roof being absolutely water-tight. The particular feature of this glass is the clearness and brightness of the light obtained, owing to the special ingredients used to make the glass as far as possible colourless. This renders it suitable for such positions as the one under notice.

The contract for the foundations, which also included the structural work up to the first-floor level, and including steel and concrete suspended floor and beams, was, as already mentioned, entrusted to Mr. Thos. Rowbotham, of Coventry-road. The foundations, which were carried out to the plans and instructions of the architects, are of Portland cement concrete, and brickwork of Staffordshire brindled bricks in cement mortar, steel grillages being provided where considered necessary, and steel stanchions fixed on concrete and stone bases placed in position for carrying the floors above. The foundation scheme included the formation of necessary subways for the conveyance of H.W. and other pipes, etc. The foundation portion of the work was completed by June, 1909, and handed over to the contractors for the superstructure, the Building Construction Company, Ltd., of London.



Birmingham Council House Extension.

Fig. 8. View of Steelwork in Bridge over Edmund-street.

The whole of the electric light fittings for the art gallery corridor and portion of the fittings for the bridge leading out of the old gallery into the new were supplied by Messrs. Peyton & Peyton, Ltd., Birmingham and London. To obtain the best results for the lighting of the art gallery a variety of experiments were tried from suggestions made by Sir Whitworth Wallis, the Committee, and others. The architects tried to aim at a diffused light which would light up the various pictures without altering the various tints, and by experiments Messrs. Peyton & Peyton found that the best result obtained was from a series of electric lights contained in a frosted globe with a metal cover. The lights were arranged at a scientific angle, and to increase the volume of light a silver-plated mirror was employed, which reflected the light at different angles into the bowl of the fitting, and which then gave practically a concentrated diffused light which did not affect the colours in the pictures. The net result of the whole of the experiment is that a brilliant light is achieved without glare.

Messrs. H. T. Jenkins & Son, marble merchants, Torquay, carried out the marble-work, Hopton Wood and Echaillon stone-work to the interior.

Messrs. Arthur Lee & Bros, Ltd., carried out work at three entrances—two in Congreve-street and one in Edmund-street. These portions consisted entirely of Hopton Wood stone, with the exception of the columns, which were of Greek Cippolino with bronze caps and bases. The whole of this work was British throughout, and was carried out by the firm at their works at Hayes, Middlesex.

The lifts were supplied by Messrs. R. Waygood & Co., Ltd., of Falmouth-road.

London, S.E. This firm supplied one electric passenger lift (Education Department), similar to the lifts on the Tube railways (load 9 cwt. or six persons, speed 200 ft. per minute); one electric service lift; one suspended hydraulic lift (Art Department); and one electric goods lift (Gas Department).

The Birmingham and Midland Counties Val de Travers Paving Company, Ltd., carried out considerable quantities of Val de Travers asphalt work, of which the following is a description:—Flat and vertical damp-courses, roof-gutters, flats, covering to cornices, lining to bridge, etc. The total area was something like 70,000 super. ft.

VENTILATION OF THE HOUSE OF COMMONS.

THE Rev. John B. Lock writes to the *Times* of last Friday on the result of the experiments in heating and ventilation which in the last few years have been going on in lecture-rooms and examination-rooms in the University of Cambridge. He says: "Our large examination hall (106 ft. long by 51 ft. wide) seats about 1,000 persons (there is only one small gallery, which may be left out of account). Radiators heated by hot water are placed in the hall near the walls at the floor level. Fresh air is introduced into the hall by an inlet fan through two rows of gratings placed all along the two longer sides of the hall at the height of 8 ft. or 9 ft. above floor level. In the ceiling along the central line are seven large openings through which air is drawn out of the hall by an outlet fan. The fresh air sent into the hall can be sent direct from the outer air, or it can be passed through a heating-chamber containing coils of hot-water pipes. Thus fresh air of any desired temperature down to that of the outer air can be pumped into the hall, and by means of the radiators in the hall the temperature of the hall itself can be maintained at any desired level. The result of two years' observation seems to have established the fact that the cooler the fresh air sent in the pleasanter is the atmosphere in the hall, and that when the hall is full it is difficult to send in air cool enough, even when the outside temperature is as low as 40 deg. Arrangements, however, are being considered by which it will be possible to cool the incoming air by passing it over ice. What happens seems to be this. The air on the floor of the hall up to the height of the necks of the occupants has little movement and remains warm and practically unchanged, while the cold air coming in with a steady and almost imperceptible flow on both sides of the hall at the height of 9 ft., spreads itself over the hall, and, being relatively heavier than the warmer air in the room, slowly falls to the level of the faces of the audience. It is then breathed, and, being thereby made warmer and therefore lighter than before, it rises up through the heavy incoming air and is drawn away through the outlets in the ceiling. The result is that while the bodies of the occupants of the room remain comfortably warm the air they breathe is cool and fresh and the feeling of oppression so common in rooms warmed by hot air is altogether absent.

The ventilation of the second examination hall has recently been rearranged on these lines with similar results. In this case no provision has been made for warming the incoming air, nor is it now intended to make such provision, but it is proposed to put trays for the reception of ice in the place of electric heaters, which at first it was thought might be necessary.

There is one other small point. One of our laboratories is warmed by fresh air which is heated by being passed over pipes heated by steam; others are similarly supplied with fresh air warmed by hot-water pipes. In the first case the oppression and discomfort is such that some of our professors have stopped up the ducts by which the warm air is supplied, preferring to work in the cold without the warmed fresh air. This discomfort is not so noticeable when the air is passed over hot-water pipes at a much lower temperature than that of steam. In fact, the passing of air over hot pipes, especially if the pipes are of the temperature of steam, seems to render it unpalatable.

These results seem to suggest that the main reason why the atmosphere of the House of Commons is so relaxing is that the pure air which is so liberally passed through the room is supplied at too high a temperature, and that matters are aggravated by the air having been warmed by being passed over pipes at the temperature of steam. In fact, although the air is doubtless pure, it seems not to be fresh, but has been cooked and has lost its invigorating qualities.

If cold air is to be supplied, it is obvious that it must not be delivered through gratings in the floor, but through a multitude of small gratings at a suitable height in the walls."

SLAG CONCRETE.

HERR A. KNAFF, in *Stahl und Eisen*, 1912, gives the results of experiments upon the chemical composition, porosity, and degree of fineness of the components of slag concrete.

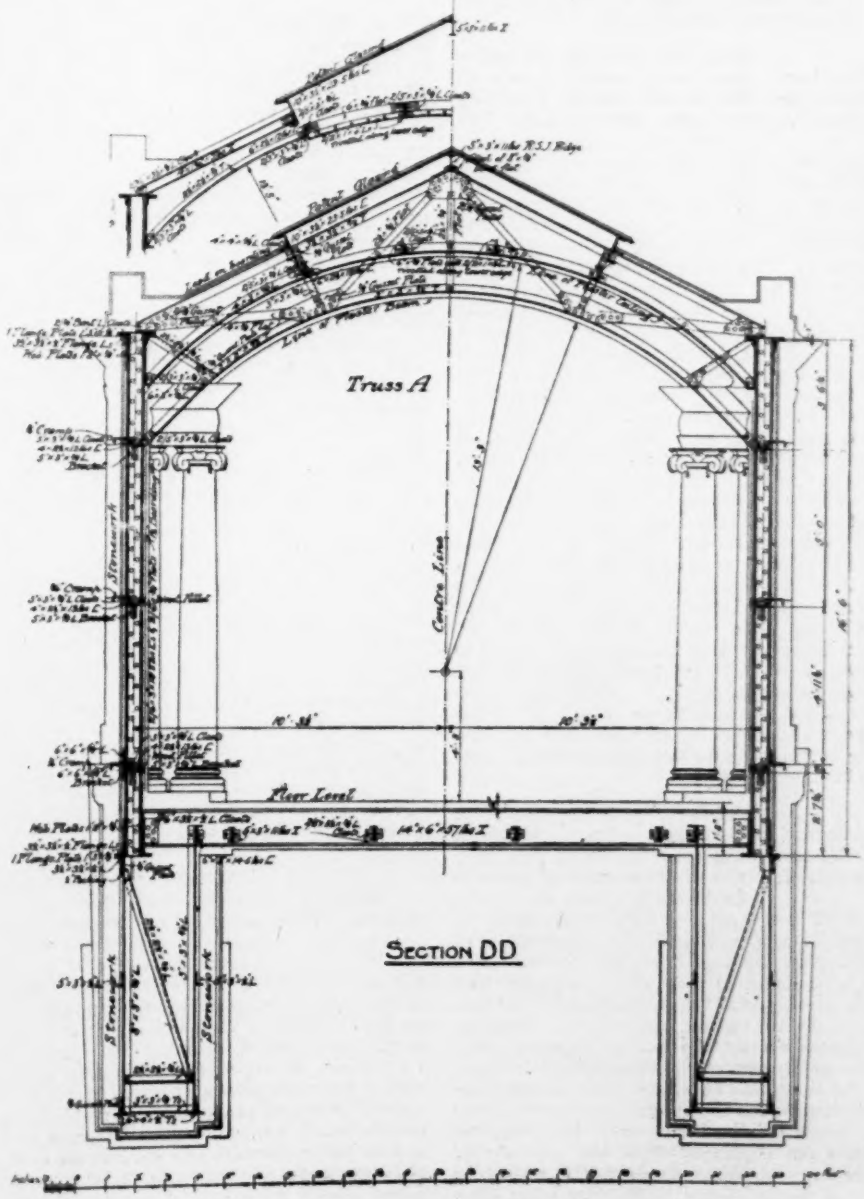
Two sorts of slag may be used:—(1) Lump slag, which must not be so basic as to disintegrate in the air, and is best used after being exposed to the weather; and (2) slag sand, which is used in conjunction with lime or Portland cement to form the binding agent. Besides its chemical composition, slag-sand has two important properties, namely, (*a*) the air-volume contained in unit volume of the heaped-up, dry material. That is, $1 - \frac{r}{s}$, where r is the apparent and s is the actual specific gravity of the material. And (*b*) the degree of diminution in volume of the material when subjected to compression by stamping.

A large number of tests were made with mortars composed of 1 volume of Portland cement and 3, 5, 6, 8, 10, 12, 14, and 16 volumes of various kinds of natural sands and slag-sands respectively. The crushing strengths of the mortars were determined after 28, 45, 60, and 100 days, in air and under water respectively; and the results were plotted in curves where the ordinates were strengths and the abscissæ were ratios of cement to sand. Curves of very similar character were obtained in the cases of washed river sand and a large variety of blast furnace, foundry, and steel slags, the distinctive features of the curves being the steep gradients between the points representing cement mixtures 1 to 3 and 1 to 6, and the flatness of the curves representing the "lean" mixtures from 1 to 6 to 1 to 16. An exception was found in the case of highly manganiferous slags from spiegeleisen, the strengths of which diminished less rapidly with increasing "leanness"; the minimum strengths of these mixtures of ratio 1 : 16 being considerably in excess of the minima for the other sands and slag-sands which were tested. The increase in the basicity of a slag was found to be accompanied by a corresponding increase in "activity."

The fineness of the material considerably influenced the strengths of the mortars. Up to a certain point slag-sand behaved like ordinary sand, and increase in fineness was accompanied by decrease in strength, owing to the fact that a certain quantity of cement no longer sufficed to knit together the increased surface area of the sand.

Beyond a certain degree of fineness, however, certain slag-sands, especially spiegeleisen slags, became active and increased in strength with increasing fineness.

In preparing concrete the filling material, such as lump slag, should be freed from adhering impurities and graded into, increasing degrees of fineness, say, for example, three in number. Then the air volume of these (1), (2), and (3) should be determined. The quantities to be used should then be so selected that the volume of (2) and (3) exactly fill up the air volume of the coarsest grade (1), and the volume of mortar necessary for the concrete would then be represented by the total remaining air-volume of the mixture so obtained.



Birmingham Council House Extension.

Fig. 9. Steelwork in Bridge over Edmund-street.

CONSTRUCTION NOTES.

The Fire at the Equitable Building, New York. THE destruction of the Equitable Building, New York, by fire, on January 9, 1912, involved the loss of six lives. The building was valued at about 700,000*l.*, while the contents were of great value. Technically, the fire brought out a number of important features, and the Executive of the British Fire Prevention Committee considered it advisable that a reliable record of the disaster should be presented, and they have issued a Red Book on the subject.

As to the fire from the English point of view, the enormous cubic extent of the risk at stake, comprising a single block of some 48,000 ft. super., with a height equivalent to that of a ten-story building, is the prominent feature on the structural and legislative side. The absence of proper subdivision, both vertically and horizontally, and the promiscuous distribution of unprotected lift shafts are conspicuous points, whilst the dearth of exit facilities is another feature among the many defects that cannot be excused either by the age or structural evolution of the building. Had the fire occurred during office hours instead of in the early morning, the loss of life would probably have been terrible.

An interesting chapter in the report is devoted to vaults and safes, a subject all too frequently ignored, having regard to the unsuitability of most vaults, and the inadequacy of the ordinary office safe to meet fire conditions of a serious character. This chapter is the more interesting as the temperatures which were reached at this fire were not excessive, no fused cast-iron, for instance, being observable. The average maximum temperature of the fire was probably about 1,800 deg. Fahr.—*i.e.*, under 1,000 deg. C., with only exceptional spurts or moments at, say, 2,000 deg. Fahr. (under 1,100 deg. C.).

The New Woolwich Tunnel. THE new foot tunnel which has been built to connect North and South Woolwich has just been opened. The tunnel, which was designed by and the work executed under the supervision of Sir Maurice Fitzmaurice, consists of a cast-iron tube of 12 ft. 8 in. outside diameter, connecting two vertical shafts of 25 ft. inside diameter and about 60 ft. deep. The length between the shafts is 1,635 ft. The thickness of the river bed between the top of the tunnel and the river is about 10 ft. at the deepest place. The shafts consist of steel caissons formed of two skins of steel plating, the annular space between them being filled with concrete. Both shafts were sunk by excavating inside them under compressed air. They are lined with brickwork, and in each there is a spiral steel staircase giving access to the tunnel from the street above. In the well of each staircase there is an electric lift capable of carrying forty passengers. The tunnel was constructed by the shield method under compressed air. After it was completed from shaft to shaft it was lined throughout with concrete, upon which white glazed tiles are fixed. The footway is paved with York stone flags. The tender of the contractors, Messrs. Walter Scott & Middleton, amounted to 78,860*l.* 7s. 1d., but the original scheme did not include the provision of lifts, which were afterwards added at an extra cost of 5,000*l.* Some excellent tiling in the subway has been executed by the Newellite Glass Tile Company, Old Kent-road, S.E.

Disintegration of Concrete in Drains. AN investigation conducted in Germany by Dr. E. Neumann leads to the conclusion that the disintegration of concrete in drains is always due to the action of some acid. The decomposition of pyrites in the soil and the oxidisation of sulphuretted hydrogen in the drains have both been found as a source of sulphuric acid which decomposes the alumina and calcium compounds in cement and forms sulphates. The formation by the acid of insoluble salt breaks up the concrete by increasing its volume, and the formation of soluble salts causes more rapid destruction by permitting part of the concrete to be dissolved away. Dr. Neumann suggests as a remedy that the cement for concrete to be employed in drains should be made of dense clinker containing little lime. He also recommends that asphalt be used to protect all exposed parts, and that the interior of the drains should be efficiently ventilated.

Warming Buildings by Exhaust Steam. THE new premises of the Calico Printers' Association, in Manchester, are warmed throughout by means of exhaust steam supplied from the Dickinson-street electricity generating-station of the Manchester Corporation, the steam being employed in calorifiers for heating water, which is circulated in the ordinary manner throughout the buildings. We understand that the Refuge Insurance Company, of Manchester, have also decided to utilise exhaust steam for a similar purpose from the Dickinson-street station.

How to Ebonise Oak. A RECIPE given by a French contemporary for imparting to oak the appearance of ebony is as follows:—After having been cut up the wood is immersed for forty-eight hours in a hot saturated solution of alum, and then sprayed repeatedly with a decoction of logwood. Small pieces can be immersed in the decoction instead of being sprinkled. The decoction is thus prepared:—Boil 1 part of the best quality of logwood in 10 parts of water, filter through cloth, evaporate gently until the volume of the liquid is reduced to one-half the original amount, and add for each litre from ten to fifteen drops of a saturated solution of indigo, perfectly neutral. After having treated the pieces of wood with the logwood decoction rub them with a hot saturated solution of verdigris (hydrated dibasic cupric carbonate) in concentrated acetic acid, and repeat the process until the required depth of tint is obtained. It is stated that oak thus treated presents an appearance very similar to that of true ebony.

Architecture and Utility. AT a recent meeting of the Builders' and Clerks of Works' Association, held in the Temperance Institute, Newcastle, Mr. J. Wightman Douglas, F.S.I., delivered a lecture on "Construction." In the course of his remarks Mr. Douglas referred to construction in Newcastle and to the conflict between architecture and utility in the street architecture of to-day. The present serious question in architectural construction was "Will it pay?" The constructors of a past generation either had a different class of clients or they deserved credit for their courage. How many designers to-day dared suggest that a company should expend, say, 20,000*l.* to provide a cab-stand like that of the Central Station, or, say, 7,000*l.* to provide a portico like the Royal Theatre? A hideous glass and iron structure would probably be demanded. This was an age when good appearances had to be maintained as cheaply as possible, and sometimes the care required to achieve this was beyond the understanding of the average citizen, who failed to realise the subtle difference between "cheap and nasty" and "cheap and nice," which was so clear to the trained eye. This demand for cheapness had something to be said for it. Methods of trade and manufacture, ideas of comfort, etc., changed as rapidly as a cinematograph, so that buildings quickly got out of date as regarded utility. Ten years ago schools were arranged with a central hall; to-day it was admitted to be noisy or useless, and a hall was provided detached from the classrooms. Country houses had their old brew houses with expansive cellars standing practically empty, and extensive stable little used. There was therefore considerable justification for erecting many of these buildings in a less substantial manner, so that they could more easily be abolished and replaced when their utility depreciated.

Injury to Cement Work by Oil. ENGINEERS are in this country familiar with the mischief caused to concrete engine beds by spilling thereon certain kinds of oil. In 1892 the Association of Portland Cement Makers in Germany investigated the subject, and came to the conclusion that while porous cement work was always attacked by petroleum, vulcan oil, or rape-seed oil it was possible with a very non-porous surface, formed of one cement to one of sand, and very carefully hardened before use, to employ concrete which would perfectly resist any oil. These conclusions now require further revision, for it has been found that if an animal or a vegetable oil be spilled upon the concrete the oil goes rancid; glycerine separates out, forming lime soaps, so that the cement work crumbles. A fluoride of calcium paint is of service in this case, or a plate of glass may be used to receive the drip of oil, and periodically cleansed. An asphalt coating is of no use, as the oil dissolves it.

With mineral lubricating oils—usually members of the paraffin series of carbon compounds—there is rarely if ever this disintegrating effect. Tar, which is by contrast mainly composed of the aromatic series of carbon compounds, seems never to give any trouble through attacking cement concrete or rendering. These are the results of the recent investigations of the German Cement Association into the effect of different classes of oils upon cements.

Steel—Lead Coated. A NEW form of roof covering in the form of steel coated with pure lead has recently appeared on the market. It is claimed for this material that it is superior to galvanised sheets or sheet steel zinc coated, that it is not liable to crack or flake, and will, unlike zinc, take a coating of paint. Iron coated with zinc is susceptible to electrical influences, and chemical action is liable to take place with a resulting decomposition; but with this new material this chemical action is much less likely to take place, the electro-potential relationship of lead and iron being much closer than between iron and zinc. Terneplate is said to be inferior to this new material. Terneplate has a coating which is composed of 30 per cent. tin and 70 per cent. lead, but the tin has the effect of inducing rusting to take place. This new material, as has already been stated, can be painted, and can also be easily soldered. Soft water causes a discoloration of the surface, but does not injure it, but this can be prevented by painting the exposed surface.

A Large Pressure Filter Installation. OWING to complaints of lead poisoning in the part of the area supplied by the Ashton, Stalybridge, Mossley, and Dunkfield Joint Waterworks Board a special system of filtration and purification has been adopted by that body. The necessary work has been completed at a cost of 30,000*l.*, and on September 19 the new filtration stations at Greenfield, Saddleworth, and Swineshaw were officially opened. The installations comprise thirty-six pressure filters, designed to purify the total of 5,352,000 gallons of water daily, the filters and chemical plant having been supplied and erected by Messrs. Mather & Platt, Ltd., of Manchester.

Hydraulic Lime. HERR B. KRIEGER, in the *Toninder Zeitung* of 1912, draws attention to Herr Hardenbroek's statements that hydraulic lime should not be used for the manufacture of sand-lime bricks, and that the pressed raw bricks should not be allowed to dry out before being introduced into the autoclave. He also mentions the report of the Dutch Commission for the investigation of Dutch bricks and sand-lime bricks, with special reference to the work of MM. Leduc and De la Roche that appeared in the *Toninder Zeitung* of 1909. It was found that bricks made from hydraulic lime were more readily destroyed by frost than ordinary sand-lime bricks, and that the surface of the former began to harden in the raw state before the bricks were brought into the autoclave, the resulting products in consequence being deficient in uniformity.

The lime used in a large number of sand-lime brickworks was analysed, and a certain factor derived from such analyses was designated the hydraulic coefficient.

This factor is obtained by adding together the percentages present of the following oxides, and dividing that total by the percentage of calcium oxide (lime) present. The oxides just referred to are aluminium oxide ($\underset{\text{alumina}}{Al_2O_3}$), ferric oxide Fe_2O_3, and silicon dioxide S_1O_2, in the form of soluble silica.

An attempt was made to correlate decreasing strengths and increasing damage by frost in various bricks with increase of the hydraulic co-efficient. No such general relationship was found to hold good, though in the products of one brickworks where two classes of lime were used not one of the bricks made with lime having the unusually high hydraulic coefficient of 0·143 withstood the freezing test, whereas all the bricks made with lime of a lower hydraulic coefficient remained undamaged.

THE BUILDING TRADE.

THE TRADE UNION BILL.

WHEN all the agitation and excitement created by the Osborne judgment is recalled it is somewhat curious to find the Trade Union (No. 2) Bill so overshadowed by other legislation that it was considered sufficient to refer it to a Standing Committee of the House of Commons, who have recently commenced their deliberations on its provisions. Yet during the current year no questions have arisen of such importance to this country as labour questions. Early in the year the country was in the throes of labour convulsions, and a record number of working days have been lost through labour disputes. The Bill now before the Standing Committee is one of enormous importance. Whatever may be said to the contrary, until a comparatively recent date the functions of trade unions were solely what in this Bill are described as "statutory objects," namely, "the regulation of the relations between workmen and masters or between workmen and workmen, or between masters and masters, or the imposing of restrictive conditions on the conduct of any trade or business, and also the provision of benefits to members." The very fact that these objects are described in this Bill as "statutory objects" goes far to prove that these are the objects recognised by the Legislature, and that it is in the exercise of these functions that certain privileges and immunities have been granted to the trade unions, as, for instance, by the Trade Disputes Act. As such trade societies they have been allowed to exercise considerable control over their members, the Courts have been deprived of jurisdiction over the exercise of their discretion in domestic matters, and even over certain actions committed against the public in contemplation or furtherance of trade disputes. In considering the provisions of the proposed legislation too much stress cannot be laid upon this privileged position of the trade unions as trade societies, because as powers have been given to them which in practice compel workmen to join them in order to pursue their avocation and to dispose of their only capital—their labour—it becomes at once apparent that an extension of these objects may imperil the freedom of the working classes in other spheres and fetter their political or private liberty. A man who joins a trade union regards its objects as furthering his interests in his trade, but to obtain advantages in his business he does not wish to fetter his discretion in other matters, and he should no more be compelled to forego his liberty in joining a trade society than he should in joining an approved society under the Insurance Act in order to obtain the full benefits provided by that Act.

The litigation on the powers of trade unions to make a levy for Parliamentary purposes may be said to have commenced with the case of Steele *v.* South Wales Miners' Federation (noted the *Builder*, January 26, 1907), which was decided by a Divisional Court in the union's favour. This decision, and that of the Chancery Division in the Osborne case, was reversed in the Court of Appeal (see the *Builder*, December 5, 1908) in the latter case, and the House of Lords affirmed that decision. The Government, in the present Bill, propose to override the principle of that decision, but this does not satisfy the Labour Party, because, although the Bill empowers the unions to engage in political objects, it to some extent safeguards the right of the minority to decline to subscribe to political objects with which they are not in sympathy.

The above observations may assist our readers in considering the questions now before the Committee, but the proceedings in Committee are very briefly reported.

The Bill is very curiously drafted. In Clause 3 (2) certain political objects are defined, and unions can only expend their funds on these objects subject to certain conditions laid down in the first part of the clause. If there be political objects outside those defined by this clause, this Bill does not prohibit them so long as the principal objects of the union are "statutory objects." To obtain registration the principal objects of the union have to be statutory objects. It will be seen that if the unions engage in political objects outside those specified in the Bill—the specified objects, shortly stated, being the payment of the election expenses of any candidate for any public office (an expression which includes even an election to a Board of Guardians), his maintenance in office, expenditure on meetings, and the distribution of literature in connexion with such elections, or generally, unless they be for statutory objects—then in connexion with those objects not thus defined the powers of unions are by this Bill left at large, and it is possible that questions similar to these raised in the Osborne case may again come before the Courts for decision. In Committee an amendment was moved limiting the powers of trade unions to "statutory objects," and the political objects as defined by the Bill, a course which would have obviated the uncertainty indicated above, but this amendment was negatived by 22 votes to 18.

Mr. Ramsay Macdonald moved an amendment which would have taken away the protection, such as it is, which the Bill affords to members who do not desire to subscribe to the political objects, arguing that the minority should not be regarded. The Attorney-General pointed out that if the unions were confined to labour questions there might be something to be said for this contention, but that where highly controversial matters were involved it was not right to compel a man to support political propaganda to which he was diametrically opposed. It would appear that this injustice has only to be stated to become apparent, but all the same the amendment was only negatived by a majority of two.

Many important points have yet to be considered, as, for instance, the safeguards offered to the minority, and, above all, the question whether the provisions of the Trade Disputes Act, 1906, which protect the unions from being answerable in the Courts of law in respect of tortious actions committed by them, will extend to acts done by them in their enlarged political sphere, and when these come before the Committee we shall treat of them in a further paper.

PAINTING AND DECORATING STUDENTS' VISIT.

ON Saturday, October 26, the students of the painters' and decorators' classes, held at the Battersea Polytechnic, Willesden Polytechnic, and Redhill Technical Institute, accompanied by their instructors, Mr. Charles H. Eaton and Mr. John West Derrett, visited the varnish works of Messrs. Robert Ingham Clark & Co., Ltd., at West Ham Abbey. The party assembled at Westminster and were met by Mr. Henry Corner, one of the firm's representatives. At the works they were received and welcomed by the works manager, Mr. T. W. Bamford, who invited them to view a variety of samples and specimens of oils and gums used in the manufacture of high-class varnishes. He also gave some interesting details of the sources from which such materials are obtained.

They then proceeded through most of the twenty-six buildings on the site, where, by the way, once stood the Abbey of West Ham, and some of the modern machinery of the model workshops were set in motion. Among the interesting processes seen were oil boiling, where a special exhaust apparatus carried away the fumes, gum crushing and running, and the grinding of zinc oxide. Special mention should be made of the Pearline and Abbey white enamel factory, where the latest machinery is employed in the manufacture of these specialities.

The last building inspected was the large Exhibition Hall, which has only recently been completed, its object being to serve as a permanent invitation to all interested in the art of painting and decorating.

At the conclusion a vote of thanks was passed to the firm

LIVERPOOL BUILDING TRADE.

Liverpool building trade workers have started a movement, it is stated, to secure a higher rate of wages, and notices have been given to the Master Builders' Association on behalf of the men. The joiners and masons ask for 2d. an hour increase, and the bricklayers and slaters 1d. an hour.

GENERAL BUILDING NEWS.

ABERDEEN RAILWAY-STATION.

Constructed about forty-five years ago, the passenger station at Aberdeen has long been inadequate for modern traffic requirements. Powers for its reconstruction were obtained in 1899, and the works have recently been commenced. The new station will include thirteen platforms in all, the four through lines being on the west side and the buildings on the east side approached by a covered roadway. The main roof, of the ridge and furrow type, will be 600 ft. long by 150 ft. wide, with transverse girders spaced 35 ft. apart longitudinally, and supported by piers and columns. Outlying platforms will be sheltered by roofing of the umbrella type. Various works connected with the general reconstruction of the station have already been executed. These include the widening of the approach viaduct from Ferryhill Junction, the remodelling of the goods depôts of the Caledonian Railway and the Great North of Scotland Railway, and additional sidings.

ROBERT GORDON'S TECHNICAL COLLEGE.

The original college, the work of Mr. Ogg Allan, dates from 1871, and the building was extended in 1890 and 1903 by Mr. William Kelly, A.R.S.A. Messrs. Kelly & Nicol have now made an addition to the Domestic Science School. The new buildings include a demonstration-room with floor space of 900 sq. ft. There are two cookery kitchens of equal size, the total floor space being 2,400 sq. ft. The science-room has a floor space of 575 sq. ft. There is accommodation in the new buildings for 184 students working simultaneously. The contractors for the new building, all of Aberdeen, were:—Mason work—Mr. George Hall; carpenter work—Messrs. D. MacAndrew & Co.; plaster work—Messrs. James Stephen & Son; plumber work—Messrs. John Blaikie & Son; slater work—Messrs. Alexander Harper & Sons; asphalter work—Messrs. J. Scott & Son; painter and glazier work—Messrs. G. Donald & Son; smith work—Mr. George Bisset; electrical work—Messrs. Pratt & Keith. The clerk of works was Mr. John Malcolm.

SCHOOL OF PHOTO-ENGRAVING, BOLT-COURT, FLEET-STREET, E.C.

Lord Cheylesmore, the Chairman of the London County Council, opened on the 30th ult. the new building of the School of Photo-engraving and Lithography, in Bolt-court, Fleet-street. The new building stands on the site of that in which, since 1894, the school work has been carried on, and accommodation is provided for a museum, a lecture hall, a photographic studio, etching-rooms, rooms for work in lithographic drawing, collotype, and photogravure, drawing from the life, and colour composition. Messrs. Patman & Fotheringham, Ltd., of Theobald's-road, W.C., and Park-street, Islington, N., were the builders and general contractors. The architect was Mr. W. E. Riley, Superintending Architect of the London County Council.

BUILDING TRADE DEPRESSION IN EDINBURGH.

The annual meeting of the Guildry of Edinburgh was held in Edinburgh City-chambers on the 28th ult. Lord Dean of Guild Carter, in presenting the statement of the business which had occupied the attention of the Court during the year, expressed regret that the tale he had to tell was a most depressing one, depicting as it did the utter stagnation of the building trade in Edinburgh. This was doubly disappointing considering the view which he expressed to them last year, viz., that the depression in the building trade had turned the corner, and that brighter times were in store for them. The value of the work passed through the Dean of Guild Court in 1910 amounted to 349,895*l.*, so that when in the following year the sum had risen to 474,578*l.*, they were justified in concluding that the tide had turned, and that brighter prospects were at hand. But this year they found their hopes dashed to the ground, for the value of the work turned out to be only about 323,385*l.* The main drop in business in the past year had occurred in connexion with public buildings, for, whereas in 1911 they had 154 public buildings on their roll of cases, this year they had only sixty-nine such public buildings on the list, and none of them of very great magnitude, the largest contract being for the Fountainbridge School, at a cost of 17,000*l.* The whole of this kind of work amounted to 116,000*l.*, as compared with 275,000*l.* in the

preceding year. While there were built thirty-one self-contained houses more than in the previous year, there were eight fewer blocks of tenement houses, so that the actual number of individual houses was on the decrease, and the community, instead of expanding, was tending to contract. This was also reflected in the net productive rentals of the city on which their rates were assessed, for while in 1910-11 these amounted to 2,828,718*l*., in 1911-12 they only came to 2,826,762*l*., and were estimated for the current year at 2,825,037*l*., showing the assessable value of the city to be on the decline. One factor, however, in the problem was a little more reassuring, and that was that the rental value of unlet property had decreased during the last year by 10,000*l*., thus showing that the unlet property was gradually being absorbed, and when that absorption became more complete new buildings would again come into demand. The money which would be spent on the widening of the roads at Lothian-road and Fountainbridge by the removal of the canal basin, in so far as it would render this particular spot more attractive and less of a blot on the fair face of Edinburgh within a few minutes' walk of their beautiful Princes-street, would be profitably expended, to say nothing of the direct returns which would come from this area in future as a rateable subject. He had also hopes that the liberation of this area in the very heart of the city would encourage extensive building operations and so come to the aid of an industry which, at the present moment, was practically dead.

RECONSTRUCTION OF PERTH ACADEMY.

There has been circulated among the members of the Perth School Board a report by Messrs. Miller & Jarvie, architects, as to the practicability of reconstructing and adapting the Perth Academy and Sharp's Institution to form a junior or preparatory school, together with the respective costs thereof.

TOWN HALL, PORTOBELLO.

Some time ago the Corporation acquired the property of Inverey House, which is situated on the south side of the High-street and about 40 yds. distant westwards from Bath-street and Brighton-place. The new hall, the foundation-stone of which was laid on the 25th ult., occupies the north-eastern section of the property acquired, and is set back about 45 ft. from the present front boundary wall. The Corporation decided, however, at a recent meeting to widen the High-street at this point to 60 ft., which will result in an encroachment of 10 ft. on the property of Inverey House, thus making the front of the hall building about 35 ft. distant from the street frontage line. This ground will be laid out as an ornamental approach to the new building. The hall is designed to accommodate 1,000 persons, allocated equally to the area level and the balcony respectively. The entrance is by an outer vestibule giving access to a crush hall 45 ft. long by 15 ft. wide. At either end of this hall staircases lead to the galleries, while cloak and retiring rooms are provided with lavatory accommodation. On the right and left corridors lead to side doorways giving access to the hall. The galleries and balconies occupy three sides of the hall, a back gallery being formed over the entrance vestibule. The galleries connect at the farther end of the hall with two emergency staircases. At the first-floor level—accessible by the principal staircases—a small hall or committee-room is placed, capable of accommodating about 120 persons. The platform is capable of seating about seventy persons, and has an ornamental proscenium opening of 36 ft. The main hall is 80 ft. long by 58 ft. wide and 38 ft. high. It will have a roof, semielliptical in section, which will be pierced at the spring by five semicircular lunettes on either side. The roof will be of steel construction. The entrance front consists of a portico of four three-quarter columns, flanked by two pylons more plainly treated. The entrance doorway forms a central feature in the scheme of fenestration, and a balcony is placed over the central doorway, access to which is obtained from the small hall over the entrance vestibules. In the rear of this portico the gable of the large hall rises, and this is flanked by solid tower-like features which contain the staircases. The centre of the hall gable is pierced by a semicircular window 16 ft. in diameter. The building will cost over 8,000*l*. The whole work is being carried out from designs prepared by the City Architect, Mr. James A. Williamson, A.R.I.B.A.

TRADE NEWS.

The "Boyle" system of ventilation (natural), embracing Boyle's latest patent "air-pump" ventilators and air-inlets, has been applied to the Palace Theatre, Westcliff-on-Sea.

The pedestal for the memorial to his late Majesty King Edward VII., to be erected shortly in Birmingham, is in course of preparation in the works of the Stancliffe Estates Company, Ltd., Darley Dale, and they have also recently supplied the pedestals for the following memorials, viz.:—King Edward VII. at Brighton, Lord Tredegar at Cardiff, Capt. Cook at Whitby, Marquis of Ripon at Ripon. Another work at present in course of erection for which the firm are supplying their stone is the Land Registry in Lincoln's Inn-fields, London, for his Majesty's Government.

The Tredington Isolation Hospital, Gloucestershire, is being supplied with Shorland's double-fronted patent Manchester stoves with descending smoke flues, patent Manchester grates, patent exhaust roof and inlet ventilators, by Messrs. E. H. Shorland & Brother, Ltd., of Failsworth, Manchester.

APPLICATIONS UNDER LONDON BUILDING ACTS, 1894 to 1909.

At Tuesday's meeting of the London County Council the following applications under the London Building Acts were dealt with. (The names of the applicants are given in parentheses):—

Lines of Frontage and Projections.

Clapham.—Erection of an addition to the Northcote-road Baptist Chapel, Battersea, next to Wakehurst-road (Messrs. Spalding & Myers).—Consent.

Dulwich.—Erection of a wood and glass porch in front of No. 445, Lordship-lane, Dulwich (Messrs. Malpress & Northcote for Mr. W. Downing).—Consent.

Lewisham.—Erection of bay-windows and iron and glass hoods to eight houses on the south-western side of Chudleigh-road, Lewisham (Messrs. J. W. Heath & Sons).—Consent.

Marylebone, East.—Erection of projecting columns and an entablature on the Oxford-street frontage of a proposed hotel building to be known as the Princess's Hotel, Oxford-street, St. Marylebone (Messrs. Boehmer & Gibbs for Mrs. M. Clark).—Consent.

Paddington, South.—Erection of projecting balconies at Nos. 81 and 83, Edgware-road, Paddington (Mr. P. W. Davis).—Consent.

St. George, Hanover-square.—Erection of two projecting illuminated signs at No. 51, New Bond-street (White House Linen Specialists, Ltd.).—Consent.

St. Pancras, South.—Erection of a flight of steps in the area of No. 24, Guilford-street, St. Pancras, next to Guilford-place (Mr. S. A. S. Yeo).—Consent.

St. Pancras, West.—Erection of the North-Western Polytechnic upon a site on the southern side of Prince of Wales-road, St. Pancras.—Consent.

Wandsworth.—Erection of four houses on the southern side of Nightingale-lane, Clapham-common, with flanks abutting upon Bracken-avenue (Messrs. E. Evans & Sons for Mr. E. Evans).—Consent.

Woolwich.—Erection of an iron balcony in front of Granville House, Green-lane, New Eltham (Messrs. Chudleigh Brothers).—Consent.

Width of Way.

Woolwich.—Erection of buildings on the north-western side of Cantwell-road, Woolwich, with the flanks of two of such buildings next to the public footway leading from Cantwell-road to Herbert-road (Mr. A. H. Jennings for Mr. T. P. Blower).—Consent.

Width of Way and Line of Frontage.

Deptford.—Rebuilding of Nos. 90 and 92, High-street, Deptford, abutting upon Giffin-street (Messrs. Gregg & Detmar for the London City and Midland Bank, Ltd.).—Consent.

Space at Rear.

Chelsea.—Alterations and an addition at the rear of No. 93, Cheyne-walk, Chelsea (Mr. H. H. Jewell for Mrs. A. Morrison).—Consent.

Formation of Street.

Hampstead.—Formation or laying-out of a new street for carriage traffic to lead from Frognal-lane to Oakhill-avenue, Hampstead (Messrs. Farebrother, Ellis, & Co.).—Consent.

Uniting of Buildings.

City of London.—Uniting of Nos. 77 and 78, Fore-street, City, so far as relates to the formation of an additional opening at the ground-floor level (Messrs. W. Gower & Sons for Messrs. Moeller & Condrup, Ltd.).—Consent.

City of London.—Uniting of Nos. 11 and 13, St. Andrew's-street, City, by means of an opening at the basement level (Messrs. Grimwades, Ltd.).—Consent.

City of London.—Uniting of Nos. 195 and 196, Aldersgate-street, City, by means of an opening at the ground-floor level (Mr. J. R. Frost).—Consent.

City of London.—Formation of three openings between Nos. 47 and 48, Farringdon-street, City, at the second, third, and fourth floor levels (Mr. W. E. Clifton).—Consent.

City of London.—Alterations at, and the formation of openings in the party wall between No. 99 and Nos. 100 and 101, Fore-street, City (Mr. T. B. Whinney for the London City and Midland Bank).—Consent.

City of London.—Use of armoured doors in lieu of iron doors to openings in a division wall at Nos. 42a, 43, and 44, Bartholomew-close, City (Messrs. H. L. Rutty & Co.).—Consent.

Finsbury, Central.—Opening and staircase uniting Nos. 59 and 61, Clerkenwell-road, Finsbury, with a building at the rear (Messrs. Weatherall & Green).—Consent.

Holborn.—Uniting of Nos. 43 and 45, Gray's Inn-road, Holborn (Messrs. Macintosh & Newman for the New Hudson Cycle Company, Ltd.).—Consent.

Kensington, North.—Uniting of No. 50, Lonsdale-road, Notting Hill, with the one-story lock-up shop adjoining (Mr. L. Cutting).—Consent.

St. George, Hanover-square.—Formation of an opening in the party wall between the premises of Krieger Electric Carriage Syndicate, Ltd., No. 48a, Gillingham-street, Eccleston-square, and premises adjoining in the occupation of Messrs. T. Tilling, Ltd. (Mr. G. S. F. Rutty for the Krieger Electric Carriage Syndicate, Ltd.).—Consent.

St. George, Hanover-square.—Uniting of Nos. 17 to 21, Dering-street, St. George, Hanover-square, with Nos. 315 and 317, Oxford-street (Messrs. Withers & Meredith).—Consent.

Woolwich.—Doors of special construction in lieu of iron doors to openings in a division wall at the Royal Arsenal Co-operative Society's premises, Powis-street, Woolwich (Fireproof Doors, Ltd.).—Consent.

Cubical Extent.

Battersea.—Addition at the premises of Messrs. Carlo Gatti, Stevenson, & Slaters, Ltd., Park-road, Battersea (Mr. H. P. Drew).—Consent.

City of London and Finsbury, East.—Re-erection of a division at the brewery premises of Messrs. Whitbread & Co., Ltd., Chiswell-street, E.C. (Mr. A. Dixon for Messrs. Whitbread & Co., Ltd.).—Consent.

Strand.—Erection at the premises of Messrs. Robinson & Cleaver, Regent-street, Beak-street, Kingly-street, and Chapel-street, of a division exceeding 250,000 cubic ft. in extent; openings in division walls at the said premises exceeding the statutory size and provided with double steel rolling shutters in lieu of iron doors; the omission of the carrying up of the division walls above the concrete roofs; and the erection of a steel-framed division wall between the staircase next to Regent-street and the adjoining divisions southward and eastward (Messrs. Crickmay & Sons for Messrs. Robinson & Cleaver).—Consent.

Buildings on Low-Lying Land.

Rotherhithe.—Erection of thirteen dwelling-houses on a site in Clarence-street, Rotherhithe (Mr. J. J. Freeland for Messrs. E. Wells & Son, Ltd.).—Consent.

PROJECTED NEW BUILDINGS IN THE PROVINCES.*

ABERAVON.—School; Mr. W. H. Nash, architect, Angel-street, Neath. Additions to Cottage and Accident Hospital; Mr. James Roderick, Surveyor, Town Hall, Aberavon.

Accrington.—Additions to Technical School (1,200*l*.); Mr. J. Rhodes, Secretary to the Technical School, Town Hall, Accrington.

Amersham (Bucks).—Proposed extensions to school for the Governors of Dr. Challoner's School, Amersham.

Audley.—School for the Trustees, Wesleyan Methodist Church, Audley.

Bamber Bridge.—Completion of St. Aidan's Church (3,500*l*.), for the Vicar.

Barrow.—Additions to workhouse infirmary; Mr. F. Taylor, Clerk, Guardians' Offices, Barrow. Additions at day and Sunday-schools (750*l*.); Ven. H. B. M. Lafone, St. George's Vicarage, Barrow.

Bath.—School (10,000*l*.); Mr. F. D. Wardle, Town Hall, Bath.

Benfieldside. — Murray Commemorative Hospital; Mr. J. J. Eltringham, architect, Railway-terrace, Blackhill, Co. Durham.

Biddulph.—Enlargement of school; Mr. G. Balfour, County Hall, Stafford.

Birkenhead.—Institute (3,000*l*.) for the Vicar, St. Michael's Church, Carlton-road, Birkenhead.

Birmingham.—Theatre, King's Heath; Mr. F. Smith, builder, Mosley-road, Birmingham. Warehouse, etc., for Messrs. J. R. Gaunt & Son, Ltd., military and naval ornament manufacturers, Warstone-parade Works, Birmingham; Messrs. Riley & Smith, architects,

* See also our list of Competitions, Contracts, etc., on another page.

Colmore-row, Birmingham. Additions to Monyhull Epileptic Home; Messrs. C. Whitwell & Son, architects, 3, Newhall-street, Birmingham.

Blackpool.—Alterations to Tivoli Theatre, Talbot-road, for Messrs. Yates Brothers & Co., Talbot-road, Blackpool.

Bolton.—School, Devonshire-road; Mr. D. Campbell, architect, Education Offices, Nelson-square, Bolton.

Bournville.—Parish hall, etc. (2,000*l.*); Mr. W. A. Harvey, architect, 5, Bennetts-hill, Birmingham.

Bray.—Sixty-four houses (9,307*l.*); Mr. L. Monks, builder, Albert-road, Kingstown.

Bromsgrove. — Additions to consumptive hospital (1,700*l.*); Mr. V. Rowe, architect, Foregate-street, Worcester.

Bucknall.—Relief-station, offices, etc., Werrington-road (700*l.*); Messrs. W. Thomas & Son, Church-road, Hanley.

Burford.—Enlargement of grammar school; Mr. R. Bacon, Town Hall, Oxford.

Burnley.—School (840 places); Mr. E. Jones, Town Hall, Burnley.

Burton Latimer.—Baths; Surveyor, Council Offices, Burton Latimer.

Bury.—Extensions to works, Hornby-street, for Messrs. A. Ashworth & Sons, hat manufacturers; rebuilding at works, Bury Ground, for Messrs. Spencer & Curedale, cotton waste manufacturers.

Cachopkin.—School (3,750*l.*); Mr. A. J. Colborne, builder, County Building Works, Swindon.

Cambridge. — Chapel, hall, and houses (20,000*l.*), for the Governors, Cheshunt College; Mr. P. Morley Horder, architect, 148, New Bond-street, W.

Carlton.—School (450 places); Mr. C. J. Bristowe, County Education Offices, Nottingham.

Castleford.—Shops and offices, Carlton-street, for the Co-operative Society.

Chalvey.—School (400 places); Mr. C. G. Watkins, County Education Offices, Aylesbury.

Chapel Allerton (Leeds).—Hall, Woodland-lane (4,150*l.*); Rev. W. A. Brameld, St. Matthew's Church Vicarage, Chapel Allerton.

Chapel-en-le-Frith. — Twenty-four houses, Peak Dale and Small Dale, for the Buxton Lime Firms Company, Ltd., 8, The Quadrant, Buxton.

Chariwood.—School (4,097*l.*); Mr. S. Ellis, builder, 28, Chertsey-street, Guildford.

Cheltenham.—Alterations to Marlborough House (467*l.*); Messrs. Collins & Godfrey, builders, Grosvenor-street, Cheltenham.

Chertsey.—School for the Governors of William Perkins' Foundation.

Cobham.—School (2,600*l.*); Messrs. G. E. Everitt & Sons, Ltd., builders, 79, Windmill-road, Croydon.

Co. Durham.—Enlargement of school, Chilton-lane, Ferryhill, also school (400 places), Fishburn; Mr. W. Rushworth, Architect, Shire Hall, Durham.

Cork.—Annexe to boys' dormitories; Engineer, Guardians' Offices, Cork.

Criccieth. — Sixteen houses; Mr. Morris Williams, Surveyor, Council Offices, Criccieth.

Crosshill.—Dining hall and offices at Car Depôt, Albert-road; Mr. J. Dalrymple, Tramways Manager, Burgh Hall, Glasgow.

Darwen.—Fire-station, Charles-street; Mr. R. W. Smith-Saville, Surveyor, Town Hall, Darwen.

Delgarrog.—Stores, etc. (592*l.*); Mr. J. Evans, builder, Old Colwyn.

Dewsbury.—Proposed rebuilding mill for Messrs. J. Porrett & Sons, yarn spinners.

Dover.—Post-office, Priory and Biggin streets (13,000*l.*); Messrs. G. E. Wallis & Sons, Ltd., builders, Broadmead Works, Maidstone.

Dukinfield.—Proposed new church; Rev. C. Rushey, Baptist church, Town-lane, Dukinfield.

Durham.—Extensions to Chilton-lane School (4,000*l.*); Mr. W. Rushworth, Architect, Shire Hall, Durham.

East Boldon.—Proposed Council chambers, Lanholm and Station roads; Mr. T. T. Bain, Surveyor, Rural District Council Offices, East Boldon.

Eccles.—Adaptation of building, Devonshire-road, as motor-garage, for Messrs. C. W. & S. Dean.

Egham. — Alterations to Hythe Council School (704*l.*); Mr. W. Beauchamp, builder, Englefield Green, Surrey.

Folkestone.—The following plans have been passed:—Six houses, Peter-street, for Mr. F. Menpes. Additions to Nos. 13 and 14, Clifton-gardens, Sandgate-road, for Mrs. Gurrell; Mr. A. R. Bowles, architect: Mr. O. Marx, builder. House and stores, Cheriton-road, for Messrs. Baylis & Sons; Mr. H. Videan, architect.

Glasgow. — Alterations and additions to buildings, Bath-street, for the Govan School Board; alterations to buildings, St. Andrew's-square, for the Imperial Tobacco Company, Ltd., Bristol.

Gloucestershire.—School, Aston Bank, and handicraft centre at Church-street School, Stroud; Mr. E. S. Sinnot, Surveyor, County Hall, Gloucester.

Guisborough.—Children's homes (2,157*l.*); Mr. J. G. Porteous, builder, 36-38, Redcar-road, Guisborough.

Harborough Magna.—Additions at infectious diseases hospital for the Rugby Joint Hospital Board.

Herne Bay.—Pavilion and concert hall, East Cliff (5,578*l.*); Messrs. Hardy & Co., builders, Woking.

Heywood.—Extensions to works, Rochdale-road East, for the Roe Acre Dyeing and Felting Company.

Hirnant.—School; Mr. L. Phillips, County Education Offices, Newtown.

Houghton-le-Spring. — Fire-station for the Northumberland and Durham Collieries Fire and Rescue Brigade, Scotswood-road, Newcastle-on-Tyne.

Huddersfield. — Post-office, Northumberland-street; Messrs. T. Obank & Sons, builders, Leeds-road, Thackley, Idle, Bradford.

Lancashire.—School, church, and school, Ormskirk (about 3,000*l.*); Mr. H. Littler, architect, 16, Ribblesdale-place, Preston.

Leek.—Shops, Picton-street; Mr. R. T. Longden, architect, St. Edward-street, Leek, Messrs. J. Heath & Sons, builders, Shoobridge-street, Leek. Silk mill for Messrs. Wardle & Davenport; Mr. R. T. Longden, architect, St. Edward-street, Leek; Mr. T. Grace, builder, Broad-street, Leek. Extensions to Albion Silk Mills for Messrs. A. Ward & Sons; Mr. R. T. Longden, architect, St. Edward-street, Leek; Mr. S. Salt, builder, Overton's Bank, Leek.

Limavady.—Court house (2,000*l.*); Mr. M. A. Robinson, Surveyor, City Hall, Londonderry.

Liverpool.—Factory (40,000*l.*) for Messrs. J. Bibby & Sons, oil boilers and refiners, Bibby's-buildings, King Edward-street, Liverpool.

Llanelly.—Six tinplate mills for the St. David's Tinplate Company, Loughor.

Llantrisant.—School; Mr. D. P. Jones, architect, Castle-street, Cardiff.

Luton.—Factory for Messrs. Currant & Creak, straw hat manufacturers, 39-41, Bute-street, Luton.

Marlborough.—Housing scheme; Mr. E. Ll. Gwillim, Clerk, Town Hall, Marlborough; architect to be appointed by competition.

Methley.—Offices, Savile Pit, for Messrs. Briggs, Son, & Co., Ltd.

Napsbury.—Additions and alterations at Asylum for Middlesex County Council (5,570*l.*); Mr. Rowland Plumbe, architect, 13, Fitzroy-square, W. Houses at Asylum (1,275*l.*); Mr. H. T. Wakelam, Surveyor, Middlesex County Council, Queen Anne's-chambers, S.W.

Nenagh.—Premises for the Munster and Leinster Bank; Mr. J. F. Fuller, architect, 179, Great Brunswick-street, Dublin; Mr. Samuel Hill, builder, Anglesea-place, Cork.

Newlands.—Church; Mr. P. McGregor Chalmers, architect, 95, Bath-street, Glasgow.

Newton Abbot.—Alterations at works; Mr. J. G. Clark, engineer, Newton Gas Company, Newton Abbot.

Newtown.—Hospital; Mr. G. A. Hutchins, Surveyor, County Hall, Welshpool.

Perry Bar.—School (1,517*l.*); Messrs. G. Webb & Sons, builders, 156-164, Soho-hill, Handsworth, Birmingham.

Pinvin.—Sixteen houses (150*l.* each); Messrs. Dicks & Waldron, architects, 1, Market-place, Evesham.

Portland. — School, Portland Underhill (3,950*l.*); Messrs. Jesty & Baker, builders, Castle Town, Portland.

Portsmouth. — School, Stubbington-avenue (18,890*l.*); Mr. James Tanner, builder, 15, Castle-road, Southsea.

Possilpark.—Additions at works, Balmore Park, for the Glasgow Steel Roofing Company, Ltd.

Princes Risborough.—School (1,800*l.*); Mr. C. G. Watkins, County Education Offices, Aylesbury.

Raynes Park.—School (250 places); Mr. Ramsay Nares, County Education Offices, Reading.

Reddish.—Schools for the Trustees of St. Joseph's Roman Catholic Church.

Reed.—School (850*l.*); Messrs. Grimson & Son, builders, Royston.

Rhosdu.—School (300 places); Mr. J. C. Davies, County Education Offices, Ruthin.

Roose.—Extensions to workhouse infirmary; Mr. F. Smith, Clerk, Guardians' Offices, Barrow-in-Furness.

Rotherham.—Alterations and extensions to St. Ann's-road Schools (2,536*l.*); Mr. J. Platts, architect, High-street, Rotherham; Messrs. Chadwick & Co., builders, College-road, Masbro', Rotherham. Plans have been passed as follows:—Six houses, Lister-street, for Mr. W. Middleton; three houses, Church-street, Kimberworth, for Mr. W. Lodge; alterations to premises, Wilton-lane, for the Masbro' Equitable Pioneers' Society, Ltd.

Ruthin.—Additions at Pendref Congregational Chapel (540*l.*); Messrs. T. Roberts & Co., builders, Wrexham-street, Mold.

St. Helens.—Hall (4,000*l.*); Rev. T. Baldwin, Holy Cross Roman Catholic Church, St. Helens.

Salford.—Warehouse and offices for Messrs. Ralli Brothers, cotton goods merchants, 37, Peter-street, Salford.

Shildon.—Additions to isolation hospital, Tindale-crescent (3,138*l.*); Messrs. W. Hope & Sons, builders, Coundon, Bishop Auckland. Addition to isolation hospital, Helmington-row (2,978*l.*); Mr. T. Manners, builder, Peel-street, Bishop Auckland.

Shropshire. — School, Clee-hill; enlarging school, Ifton Heath; school, Maesbury, and school, Weston Ryn; Mr. C. C. Peele, County Education Offices, Shrewsbury.

Slough.—Additions to Stoke-road School; Mr. W. Riley, Architect, County Hall, Aylesbury.

Spalding.—Thirty-six houses (5,176*l.*); Mr. J. B. Corby, architect, 15, All Saints'-place, Stamford; Mr. E. Clarke, builder, Snow-hill, Melton Mowbray.

Stonefold.—Weaving shed for Messrs. J. Rothwell, Ltd., cotton goods manufacturers, Stonefold Mill, Baxenden.

Streetly.—School (1,965*l.*); Mr. J. C. Hill, builder, Four Oaks.

Sutton (Notts).—School (4,000*l.*); Mr. L. Maggs, Architect, Shire Hall, Nottingham.

Swaffham.—Twelve houses, Holm Hale and Pickenham; Mr. W. V. Twaites, Surveyor, Council Offices, Swaffham.

Tamworth.—Stores, etc., for Guardians (1,272*l.*); Mr. F. C. Hill, builder, Four Oaks.

Taunton.—Rectory; Vicar, St. Mary Magdalen's Church, Taunton.

Warsop.—School (7,700*l.*); Mr. J. Greenwood, builder, 2, Wood-street, Mansfield.

Warwickshire.—Schools, Binley (3,395*l.*), and Wyken Colliery (1,575*l.*); Messrs. Shortridge, builders, care of Mr. Edward Field, 42, Warwick-street, Leamington.

Whitehaven.—Building works at workhouse, Low-road (1,125*l.*); Messrs. Beswick & Davies, 18, Church-street, Whitehaven; Mr. J. Young, builder, Catherine-street, Whitehaven.

Woking.—School, St. John's (3,203*l.*); Mr. S. Silk, builder, Westbury, Horsell, Woking.

Woolhampton.—Alterations to Rose and Crown for Blatch's Theale Brewery, Theale, Reading.

FOREIGN AND COLONIAL.

Portland Cement, Australia.

The Commercial Intelligence Branch of the Board of Trade is notified by the Agent-General for New South Wales that he is prepared to receive tenders up to November 4 for the supply and delivery at Sydney during 1913 of 130,000 casks of Portland cement. Tenders for small quantities will be considered provided they are for not less than 30,000 casks. The cement is to be subject to New South Wales standard specification tests before shipment. Forms of tender, specifications, conditions of contract, etc., may be obtained on application to the Agent-General for New South Wales, 123 and 125, Cannon-street, London, E.C.

Proposed Public Works in San Francisco.

H.M. Consul-General at San Francisco (Mr. A. C. Ross, C.B.) reports that it is estimated that over 32,000,000*l.* will be expended on public works in that city during the next two years. Of this amount 59,000,000 dollars (about 12,128,000*l.*) are to be spent in the erection of buildings, etc., for the Panama-Pacific International Exhibition. Among other items of proposed expenditure are the following:—

	Dollars.
Harbour Improvements	9,000,000
Civic Centre and City Hall	8,000,000
Opera House	1,000,000
Twin Peaks' Tunnel	3,500,000
Fillmore-street Tunnel	2,000,000
Stockton-street Tunnel	1,000,000
Geary-street Railroad and Extension	571,031
City and County Hospital	230,725
Carnegie Library	750,000
Refuse Incinerators	190,413
Fire Equipment and Stations	101,569
United States Sub-Treasury	500,000

Dollar = 4s. 1½d.

International Architectural Exhibition in Leipzig.

The *Deutscher Reichsanzeiger* (Berlin) of October 14 publishes a notice whereby the Law of March 18, 1904, for the temporary protection of patents, designs, and trade marks will be put in force in connexion with the International Architectural Exhibition and Special Exhibitions to be held in Leipzig from May to October in 1913 (see *Board of Trade Journal* of May 16 last, p. 341).

TRIBUNAL OF APPEAL UNDER THE LONDON BUILDING ACT.

Lewis *v.* London County Council.

THE Tribunal of Appeal constituted under the London Building Act, sat at the Surveyors' Institution on Wednesday to hear an appeal on behalf of Mr. George Lewis, under sect. 22, subsect. 1 (b) of the London Building Acts (Amendment) Act, 1905, against the requirements of the London County Council in their notice served on July 22 in respect of the building known as 21, Australian-avenue, Barbican, City. Mr. J. W. Hickman was for the appellant, and Mr. Cecil Walsh for the London County Council.

Mr. Hickman, in opening the case, said it was an appeal against the requirement of the County Council for the provision of additional protection in case of fire, and the main contest would depend, not upon the details of what had been required by the County Council, but whether any requirements of the County Council could be reasonably required under the circumstances of the case. The building was one of six floors, and was of a long, narrow shape, and there was one staircase at the eastern end. The requirements of the Council were:—(1) That stairs be provided towards the eastern end of the building from the third to the fourth floor levels, and continued from the latter floor to the roof; (2) that the existing partition and door separating the first floor from the staircase be removed and replaced by a fire-resisting partition with a self-closing fire-resisting door; (3) that a fire-resisting partition with a self-closing fire-resisting door be provided to separate the upward and downward flight of stairs at the first-floor level; (4) that a fire-resisting partition be provided at the ground-floor level upon the eastern side of the upward flight of stairs, to separate this flight and the landing at the foot next the street; (5) that the exit doors from the stairs to the street be kept fully open and locked against the wall, etc.; and (6) that clear gangways be kept up to and between the stairs and exits upon all floors. With regard to the first requirement, at the present moment there was on the fourth floor a gangway outside the window at the eastern end of the building guarded by a hand rail, connecting with another building on the other side of the party wall.

Mr. Walsh said that this had been put in since the notice, and the County Council were prepared to agree to this as an alternative to the staircase leading to the skylight, provided that the window was altered.

The Chairman said the Tribunal had viewed the building, and they took it that the parties would agree that this gangway would be an efficient substitute for the staircase to the roof, provided that the window was made into a casement-window or otherwise, to the satisfaction of the Council.

Mr. Hickman expressed agreement with this. With regard to the second and third requirements, when the preliminary notice was served the floors were in different occupation, but now the first, second, third, and fourth floors were in one occupation, and, therefore, he imagined that the Council would not insist on the requirements. The result of carrying out the fourth requirement would be that a kind of box would be formed, which, he should think, would be an excellent means of allowing a fire to get a good hold of a building. The fifth and sixth requirements ought not to be placed on the owner at all. It was a matter for the occupiers, as the owner could have no control over such things. The top four floors were used by a furrier, and the ground floor and basement by a boot warehouse, and no one slept on the premises. The possibility of any serious fire occurring on the premises was infinitesimal. There was no question of a dangerous trade being carried on, and his clients were prepared to enter into an undertaking to give the County Council notice if at any time the premises should be used for trades in which celluloid or other dangerous substances were used. He submitted that the essential point was that persons should have proper notice of the outbreak of fire, and in this case the owners had installed a most efficient automatic fire-alarm system on the premises.

The Chairman pointed out that they could not consider the provision of a fire-alarm, however skilfully arranged, as a substitute for means of proper escape in case of fire.

Mr. Hickman said it was one of the circumstances of the case bearing upon what might be reasonably required as means of escape.

The Chairman said the Act provided for permanent means of escape in case of fire, and they had to take into account the circumstances of each building; but they could not take into consideration the question of the efficient or inefficient working of a fire-alarm. It was quite clear that they could not substitute a fire-alarm for the means of escape which they had to deal with under the Act.

Mr. Hickman argued that, as the existing partitions would resist a fire getting into the staircase for at least twenty minutes, the early notice of the outbreak of fire was of the greatest importance; and in this case, where there was a fire-alarm, there would be no additional security if the requirements of the County Council were carried out. Therefore, he submitted, that it was putting an unnecessary expense on the owner to ask him to carry out the requirements. Further, it would diminish the warehouse-room, which meant reduction of rent to no purpose.

Mr. W. E. Osmond, fire loss assessor, was called, and expressed the opinion that the existing partitions would resist a fire reaching the staircase, and if the occupants had warning of a fire, as was provided, they could easily get away by the present means of escape.

Mr. George Lewis, one of the owners of the premises, described the present means of escape, and said that, having examined the reports of the Chief Officer of the Fire Brigade for three years, he found that there had only been two deaths in fires occurring in similar premises.

In cross-examination, witness said he admitted that if the lower part of the premises were unoccupied, and people were working on the upper floors, there would be danger to them in case of fire, and it was to meet this contingency that he had installed the fire-alarm.

Several witnesses were also called to prove the efficiency of the automatic fire-alarm.

The Chairman, without calling on Mr. Walsh to address them, said that up to the present no objection had been raised to the requirements of the County Council. There was no specific objections except that the cost would be expensive, and there would be no return on the money spent. They had been expecting to hear some criticisms of the particular requirements, so that they might pay attention to them. The only real question they had raised there was that an automatic fire-alarm should be substituted for proper means of escape in case of fire. The Tribunal had come to the conclusion that they could not do that, and the Act did not legislate with that object.

Mr. Hickman asked if the Tribunal was of opinion that the provision of the alarm was not one of the circumstances to be considered in the case?

The Chairman said he did not say that at all, but distinct evidence had been given by the appellant's own witnesses that the building would be unsafe if the alarm was not also coupled with proper means of escape. There was no doubt that the alarm was a very valuable addition to a building, but they were not satisfied to accept it as sufficient for all purposes, and to do away with what they considered proper means of escape in case of fire. The Tribunal had seen the building, and they considered the requirements of the building very reasonable. They were all three practical men, and that was their view.

The Tribunal then made a formal order for the carrying out of a number of requirements, which were agreed on after discussion by the parties. Costs were awarded the respondents.

LAW REPORTS.

KING'S BENCH DIVISION.

(Before Mr. Justice BAILHACHE.)

Holland, Hannen, & Cubitt *v.* Lord Decies.

IN the King's Bench Division on Monday, November 4, before Mr. Justice Bailhache, an action was commenced by Messrs. Holland, Hannen, & Cubitt, Ltd., the well-known builders of Gray's Inn-road, against Lord Decies, for a balance of 6,420*l.* in respect of renovation work carried out to his Lordship's residence, Sefton Park, Stoke Poges, Bucks, under a contract dated February 2, 1911. The total cost of the works amounted to 19,920*l.*, of which Lord Decies had paid 13,000*l.*

For the defence it was alleged that the sum charged was excessive, and he counterclaimed a large amount.

Mr. Leslie Scott, K.C., with Mr. R. A. Wright, appeared for the plaintiffs; and Mr. W. J. Waugh, K.C., and Mr. H. W. Rowsell were Counsel for the defence.

Mr. Leslie Scott, in opening, said the claim was upon a contract known as the measured rate basis. The work had been done at a very rapid rate, as Lord Decies was going to America to be married and was anxious to have his house ready as soon as possible after his return. Consequently it was not possible to enter into a formal contract. A schedule of prices recognised by the building trade was agreed upon, and plaintiffs were to carry out whatever work was ordered. At the time the instructions were given the architect himself hardly knew what work was to be done. It grew and grew, and as money was to be no object the work was carried out continuously day and night, and the very best workmanship was put in. The result was a big bill, to which there were no specific objections for months until just before the action was brought, when various defences were set up. First, that representation was made by the architect that the prices in the agreed schedule were fair market prices, which they were, and, secondly, that the price of the work was to be 8,000*l.* or 10,000*l.*, whereas, in fact, the bill amounted to 20,000*l.* This increase, said Counsel, was due largely to the fact that the increased work was of a structural and ornamental character, and cost over 7,000*l.* Counsel then dealt with the correspondence, with a view of showing that Lord Decies followed the progress of the work very carefully, and knew exactly what work was being done. During the course of the work, said Mr. Scott, a letter was written to Lord Decies, in which it was stated that the total cost had then reached about 17,000*l.* Instead of complaining of this, all Lord Decies said was: "It costs a great deal, but I suppose it is all right." Counsel submitted that the defence which had been put in had not really emanated from Lord Decies, but was an afterthought of his advisers. There was a suggestion in the defence, continued Counsel, that one particular stage of the original contract had been completed, that a new arrangement had been made, and that, therefore, defendant was only bound to pay *quantum meruit* prices in regard to the rest of the work. Such a defence, however, was not consistent with the history of the case. Throughout the whole work the additional orders were treated as part and parcel of the same job. There was no doubt that the proportions of the plans and the decorative work were vastly altered, still, it was only a question of amount. It was not a contract to do a certain work by specification, but to do work at a certain rate subject to the architect's instructions.

In answer to his Lordship, Mr. Waugh said the first question was whether certain representations were made which induced the making of the contract, and whether plaintiffs were not bound by this representation. In other words, in no circumstances could they, in respect of the work which was contained in the contract shown upon the drawings, receive more than 10,000*l.*; and in any case the plaintiffs were bound by prices which were fair market prices for first-class work. Defendant further said that the architect ordered certain work in addition to the work specified, which was far more expensive, and that he did so entirely on his own authority and without the acquiescence of Lord Decies. Therefore defendant could not be held to be responsible for such work.

Mr. Horace Farquharson, architect, was then called, and stated that he had been practising as such since 1897. For some time he was a pupil of the well-known architect, Mr. E. L. Lutyens. In 1910 he was brought into communication with Lord Decies in connexion with the work at Sefton Park, and eventually he prepared the plans etc., for it. At an interview with his Lordship witness understood Lord Decies to say that the question of money did not bother him, as the money would be found for him. Defendant asked witness to mature his plans at that interview and submit them, which he did. His Lordship told him that the work was to be quite plain, as the decorative work was to be looked after later by Lady Decies' mother, who was interested in such work. The work proceeded at a very rapid pace, as it had to be carried out before Lord Decies came home.

Questioned with regard to some items of the work, witness said that all the window-sashes were ordered in teak, because in first-class work window-frames were always made of some hard wood.

Mr. Wright (for plaintiffs): Did Lord Decies ever complain to you that you were doing anything without instructions?

Witness: Not once.

Did he complain to you about the expense?—Lord Decies never complained of the expense. Both his Lordship and Lady Decies visited the work and looked at every detail.

Cross-examined by Mr. Waugh, witness said he had not gone into the question of prices at all himself, except in regard to work in the forecourt.

Whatever figures you received and communicated to his Lordship were the figures of the plaintiffs?—Yes.

You relied upon those figures?—Entirely.

It was true, witness said, that the builder considered at the start that 10,000*l.* would cover the work required, including the contingency work.

Mr. Waugh: What structural defects were met with?

Witness said that walls which were thought to be perfectly sound were, when exposed, found to be absolutely rotten. Practically every wall was rebuilt in the house, except the west wall and one of the dining-room walls.

What was the additional cost for dealing with these walls?—I could not say.

But it is an important matter?—It is a matter for the surveyor and not for my department.

But it is your estimate.—I am merely the mouthpiece of other people. The architect represents the whole body of people carrying out the work.

It was true Lord Decies said he required the work to be done plainly.

And the reason he gave was that he did not want to spend more than 10,000*l.* on the house; he said he would prefer to get another mansion if more money was to be spent?—No; the first time the question of money was mentioned between us was in the report sent by me to Lord Decies.

Did Lord Decies say that he would prefer to purchase another mansion rather than spend a larger sum of money on Sefton Park?—I cannot say.

He may have done?—It is quite possible, but no figure was mentioned.

Further cross-examined, witness denied that he took upon himself to alter some of the works without Lord Decies' authority. The work was done at very great speed, and the whole of the details were left to the discretion of the witness.

Witness denied that deal would have been the proper wood to use for painted window-sashes. In good work window-sashes were invariably made of teak.

Did you order American walnut for the window-sashes of Lady Decies' boudoir?—Yes.

And were they to be painted white?—No, I hoped to persuade Lord Decies to panel the room in walnut later on.

Did you succeed?—No, but he did other things at my suggestion later on.

Witness said it was quite possible that a Mr. Anderson was given a power of attorney over the work by Lord Decies.

Why did you not consult Mr. Anderson when you knew the way the cost of the work was increasing?—Mr. Anderson was in York, and the work was going on hard at the heels of the plans. I had to use my discretion.

You knew the cost of the work was increasing?—We did not consider that at the time; there was no time to consider anything.

Further cross-examined, witness said the question of cost was never referred to in any of the proceedings before Lord Decies went to America, and the matter was referred to the people who were going to pay. Witness had never gone into the question of price.

Do you say the prices charged were fair market prices?—Yes.

But you say you have never gone into them?—I relied implicitly upon my advisers.

When Lord Decies made the remark, "It costs a lot," did that refer to the oak panelling work only?—No.

Mr. Waugh: Did you not certify that 13,000*l.* was due to the builder when as a fact measurements were only taken on that date to an amount of 11,000*l.* or a little under?

Witness: You must ask the surveyor about that.

Mr. D. Morle, partner with Mr. Norman Evill, quantity surveyors, said his firm were employed in regard to the work at Sefton Park by Mr. Farquharson, and they prepared a schedule of leading prices in all the various trades to cover anything which would be wanted to carry out the work. The job was completed on August 4, and witness's firm did the measuring up for the purpose of the accounts. Where work was according to the schedule they used the schedule prices, and where it was not they followed the usual practice of deducing the prices from the schedule. They did this work with the plaintiffs and agreed on the prices.

Questioned with regard to the oak work, witness said the very best wood was supplied and a great deal of it had to be worked by hand, which, of course, cost more. There were instances where Cubitts' asked for a higher price than was actually agreed upon, and witness cut them down.

Cross-examined, witness said every item was gone through, and there was a bargain come to between witness's people and plaintiffs as to the price to be charged.

Mr. Waugh: If that was so, how is it that 23 ft. of mahogany was charged at 43*s.* a foot?

Witness: Oh, that was a clerical error! It ought to have been 4*s.* 3*d.*

And then there is another item, "35 ft. ditto" charged at 46*s.* a foot, making a total charge for the two items of 129*l.* 10*s.* instead of 12*l.* 15*s.*?—That was also a clerical error.

Mr. Waugh: Well, I don't see what protection Lord Decies had if this was the way the matter was gone through.

Witness said he was instructed that the whole of the work was to be plain, with the exception of a few hardwood doors.

Cross-examined with regard to the certificates, witness said it was true the work was not measured up as it went along. The measurements were taken approximately. He did take measurements, upon which he could tell Mr. Farquharson he could certify.

Do you say the prices in this schedule were fair market prices?—Yes.

What is a fair market price?—A price which would give the builder 10 per cent. profit.

I suggest to you that in nearly every instance these prices are in excess of what is understood by fair market price.

Witness dissented from this.

I suggest to you that a fair market price would be the price people would be willing to obtain for the work, taking into consideration the fact that other firms of equal repute were competing?—That practically amounts to what I have said.

Further cross-examined, witness said the market price for Portland stone and all labour was about 10*s.* 6*d.* per foot cube.

Mr. Waugh: We say 8*s.* 6*d.*

Witness: That is a matter of opinion.

For Bath stone, witness said, 7*s.* 6*d.* per foot cube was a fair market price.

Mr. Waugh said 5*s.* 6*d.* was a fair price, according to defendant's contention. His Lordship would see that such differences would amount to a very substantial sum in the aggregate.

Mr. Thomas William Donovan, branch manager to the plaintiff company, said he was responsible for the original estimate of 9,500*l.*, which was drawn up for the work at Sefton Park. Had the work been carried out according to the data then supplied to him, his firm would have made 25 per cent. profit on the work. As it was, they would only get 7 per cent. on their charges.

Mr. Benjamin Hannen, director of the plaintiff company, in charge of the building branch of his company, said that on February 9 of last year the contract was signed, Mr. Anderson, Mr. Farquharson, and witness being present. When the contract was shown to witness he noticed that there was a heavy penalty in case of non-completion within the period named. Witness said they did not know what amount of work would be required, and he objected to signing a contract on those terms. He said it was absolutely unfair to ask any firm to undertake such a contract, for how could they say how long it would take when they were given no indication of what there was to be done? Mr. Anderson then told witness that if he did not sign he would not have the contract, and the situation having arrived at something in the nature of a deadlock, Mr. Farquharson interviewed and asked witness whether he could not trust him (Mr. Farquharson) to protect the builder and see that too much work was not put upon him to carry out in the time named. Witness felt he could trust Mr. Farquharson, and signed the contract. There was a clause in the contract leaving the matter to the discretion of the architect.

Mr. Arthur Sickelmore, surveyor in plaintiffs' employ, said he went through the schedule with Messrs. Evill & Morle.

This concluded the evidence for the plaintiffs.

Mr. Waugh, K.C., then opened the case for the defence, and submitted that if it were proved that the prices in the schedule were not fair market prices, and that it were represented by plaintiffs that they were, then Lord Decies could not be bound by such prices. The next point for his Lordship's consideration was, was there any representation made to the defendant that the whole of the work then contemplated would cost more than 9,500*l.*? He contended that defendant was only liable for work done according to the plans to the extent of 9,500*l.*, and, of course, any repair work found necessary outside that estimate.

His Lordship intimated that he could not hold that there had been any representation by the plaintiffs that the prices in the schedule were fair market prices. He would also put on one side the question of the giving of the certificates as being wholly immaterial to the case. That reduced the issue very much to the question of dissimilarity between prices in the schedule and the work actually done.

Mr. Waugh then proceeded to call evidence.

Mr. George Stephenson, quantity surveyor of considerable experience, including the measuring up of the new War Office, and the Admiralty buildings, stated what was the usual form of procedure in contracts of this kind. He had examined every item in the schedule and had found that in regard to oak panelling some 19,000 ft. were charged for at 6*s.* 6*d.* a foot, whereas he could only account for some 17,000 ft., and would only allow 4*s.* a foot for it. That would mean a reduction in the total of 364*l.* Proceeding, witness alleged other instances of over-measurement and over-pricing.

The hearing was then adjourned, and was continued on Wednesday.

Albert Edward Addis, a quantity surveyor, gave evidence with regard to the items in the schedule of prices, with a view of showing that they were excessive.

His Lordship, in giving judgment, said that at the end of 1910 Lord Decies, being about to be married, was minded to make extensive alterations and repairs to his mansion, Sefton Park, and to that end employed a Mr. Farquharson as his architect. Everything had to be done in a great hurry, and the architect had only the most general intimation as to the nature of the work required to be done. He got out certain plans, which gave a broad indication of the work required. Lord Decies was naturally anxious to know about what the cost of the work would be, and rough plans with indications of the work to be done were submitted to the plaintiffs, who were an eminent firm of builders. They figured out on the plans and arrived at a sum of about 9,500*l.* Mr. Farquharson, no doubt, being influenced perhaps by his general experience of this class of work, thought that the expense would be from 8,000*l.* to 10,000*l.*, and reported to this effect to Lord Decies. The work was put in hand, but it was not by any means carried out according to the original plans. Suggestions were made by Lord Decies, and considerable alterations to the plans were made. The main alteration made in the course of the work was that, after Lord Decies had returned from America in April, 1911, he desired to have a large scheme of decoration carried out, which was not contemplated in the original plans, the result of which was that when the work was done Lord Decies was faced with a very heavy bill. Instead of the cost being about 10,000*l.*, it was nearly double that figure. Naturally, the defendant was very much surprised and disagreeably astonished. He knew that a great many extras had been ordered, and that the original estimate must have been exceeded, but he never expected so heavy an account. His Lordship sympathised with Lord Decies in that respect, and with the regret Mr. Farquharson had expressed that he had not warned the defendant as to the extent to which the original amount would be exceeded. It was a pity that that was not done, as it would perhaps have obviated the bringing of the present action. The work had to be done, and on the primary question of liability his Lordship had no doubt that Lord Decies was liable to pay. With regard to the question of details and deductions, they would go to an arbitrator to be appointed.

COURT OF APPEAL.

(Before Lords Justices VAUGHAN WILLIAMS, BUCKLEY, and KENNEDY.)

Action against Builders upon Architect's Order: Ramsden & Carr *v.* Chessum & Sons.

THIS case, the hearing of which was concluded on Wednesday, November 6, came before the Court upon the cross appeals of the parties from a decision of Mr. Justice Hamilton, the plaintiffs being metal workers of Seymour-place, South Kensington, and the defendants being the well-known builders of South-place, Finsbury, the question in dispute being liability for goods supplied on an architect's order in connexion with the building of a cinematograph theatre at 225, Oxford-street.

Mr. Radcliffe, K.C., for Messrs. Chessum & Sons, said the theatre was built for a company which had since gone into liquidation. The plaintiffs supplied a quantity of hammered silver and brass door plates, artistic door handles, and other goods, which were ordered by the architect (Mr. M. S. Ward), and for which Messrs. Ramsden & Carr contend the builders were responsible. The plaintiffs at the trial in the Court below, before Mr. Justice Hamilton, without a jury, claimed 142*l.* 13*s.*, alternatively in respect of goods sold and delivered, or as money had and received by the defendants for the use of the plaintiffs, or as money held in trust for them. Messrs. Chessum & Sons denied liability, and repudiated the authority of the architect to pledge their credit. Mr. Justice Hamilton held that the plaintiffs had failed to show that any money was received by the defendants from the company that should be allocated to the account for the goods, but that Messrs. Ramsden & Carr succeeded on the issue as to goods sold and delivered to and used by the defendants, which raised an implied promise by

them to pay for them. On that issue the learned Judge entered judgment for the plaintiffs with costs, the defendants getting costs on the issues on which the plaintiffs had not succeeded. Mr. Ward was not a party to the action, so it was a question of whether the builders or the building owners should pay.

After some discussion Lord Justice Williams said: It is plain there was a difficult question to be answered here, yet the plaintiffs asked for summary judgment without a trial. They say they believe there is no defence to the action. I can only say that is most improper, and if I were the Judge in chambers, and the summons had come before me, I should not only dismiss the summons; but I should order the plaintiffs to pay the costs in any event, and should see if I could not make the solicitors pay, too.

Mr. Eames, for the respondents (plaintiffs), said at the time the matter was in chambers his clients were unaware of the facts disclosed in Court that day.

Mr. Radcliffe said the architect ordered the metalwork, or a great deal of it, purporting to act on behalf of the contracting builder. But the architect had no authority to do that. They were extras, and the contractor was not responsible for them. Under no circumstances could his clients be held responsible. Mr. Justice Hamilton said: "If Mr. Ward is not your agent, you have had these things—they have been fixed in your house, and that is an implied contract." The contractor was not bound to supply these goods, and the architect had no authority from them to order them. They were certainly affixed by a workman of his clients, but that was by order of the architect.

Lord Justice Buckley: Did Mr. Ward give evidence at the trial?

Mr. Eames: Yes; but he was not a party to the action.

Mr. Radcliffe said what the architect should have done was to tell the contractors what things were needed and let him obtain them.

Mr. Eames said the defendants had had their goods and used them, and should pay for them. They took the benefit of them as though they were supplied under the contract. It was inferred the goods would be paid for by Messrs. Chessum. His learned friend was wrong in suggesting that the architect had done something wrong, but in the Court below Counsel for the defendants (Mr. Scott) formally admitted that they knew of the goods, that they were seen on the premises, and that they were ordered by contract. It was also admitted that they were goods treated as coming under the contract. The defendants further admitted that Mr. Ward had done nothing wrong, and the only ground on which the defendants objected to pay was that they had not been paid by the building owners. In regard to that, the sum due to his clients was included in a certificate the architect gave for 1,500*l*. There was, he submitted, authority under the contract for Mr. Ward to order the goods. There was good cause for the action because money had been received.

Lord Justice Kennedy: I did not understand that money had been received.

Mr. Eames: Oh, yes! In fact, there were bills which were treated as cash. If you take a negotiable instrument and treat it between yourself and the debtor as cash that renders you liable for money had and received, although as a negotiable instrument it has never been met. Continuing, Counsel said he wished to correct an error that was made the previous day. It was said that at the time the orders were given the Cinematograph Company was in financial difficulties. That was a misapprehension, because, so far as the first lot of good was concerned, amounting in value to 118*l*., most of the orders were given as early as April, 1910, before the architect or the builders had any idea that financial difficulties would arise. In desiring to lay the whole facts before the Court, he wished to say that the plaintiffs were not a business firm in the ordinary sense, but high-class dealers and experts. They had been accustomed to accepting Mr. Ward's orders and crediting the contractors with the items, though the first invoice in these particular transactions was made out to Mr. Ward.

Lord Justice Williams: Is not that *prima facie* evidence that Mr. Ward is liable?

Mr. Eames said it could hardly be called an invoice; it was a memo. that the goods were supplied to Mr. Ward's order.

Lord Justice Williams, in delivering judgment, said the appeal of the defendants must be allowed, and the cross appeal dismissed. He agreed with Mr. Justice Hamilton in so far as he dealt with the subsidiary questions that had been argued, but he differed on the chief point. In his opinion, the architect did not act in the character of an agent for the contractor. That being so, the question naturally arose, when the architect gave the order, had he entered into a contract on behalf of the building owner? He was not prepared to come to the conclusion that he did act as the agent in giving the order in the sense that he made a contract on behalf of the building owner, or even of the contractor. There was no proof here that he acted as the agent, authorised as such, for either the building owner or the contractor. If there was no contract on behalf of the contractor through Mr. Ward they had to see whether, under these circumstances, the contractor used the goods supplied in such a way as to imply on the part of the contractor a promise to pay or a responsibility to do so. In his opinion, they should not assume that. During the arguments in the case it had been said that the architect had twice given orders. But it did not matter how many times he had done that. What they had to consider was, when these goods were delivered at the theatre was there anything to tell the contractor that they had been ordered on his behalf, or that they had been ordered for his benefit and by his order, so that he could use them if he thought fit or reject them if he thought fit? There was no evidence to show that the contractor had any such information. They might have been sent by order of the building owner. There certainly was nothing to indicate to the contractor that he was liable for them. There was no information as to price, specifications, or conditions. He had a right to all that information, but it was not given to him. It had been said that it was the duty of the contractor, when he saw the goods, to ask for that information and to avail himself of the opportunity, if he chose, of knowing what was happening. In his opinion, the architect, if the contractor was to be held liable, should have given him all that information. It was said the contractor ought to have known these things and where the goods came from, but if there was any evidence of that it was of the faintest description.

Lord Justice Buckley concurred.

Lord Justice Kennedy dissented. He agreed with everything said and done by Mr. Justice Hamilton. The contractors had used the goods of the plaintiffs, and they should pay for them. They could not expect that the goods were a gift. They had the opportunity of using or refusing them, and they used them, and that made them liable.

By a majority of the Court the appeal of the defendants was allowed and the cross appeal dismissed.

CHANCERY DIVISION.

(Before Mr. Justice SWINFEN EADY.)

Ancient Lights at York:

Delittle, Fenwick, & Co. *v.* York Industrial Co-operative Society, Ltd.

THIS case was heard on November 4, 5, and 6, and was a claim by the plaintiffs for an injunction to restrain the defendants, their servants and agents, from so erecting premises in Railway-street, York, as to obstruct the access of light and air to the plaintiffs' ancient windows, and thereby cause a nuisance, and for damages.

Hon. Frank Russell, K.C., and Mr. J. M. Gover (instructed by Messrs. Ridsdale & Son, agents for Messrs. George Crombie & Son, of York) were for the plaintiffs; and the defendants were represented by the Hon. E. C. Macnaghten, K.C., and Mr. F. H. Maugham (instructed by Messrs. Munns & Longden, agents for Mr. F. A. Camidge, of York).

In opening the case, Mr. Russell said that the property of the parties was on opposite sides of Railway-street, York. It was a narrow street, 42 ft. in width, which approximately ran north and south. The plaintiffs were printers, and they owned Nos. 5, 7, 9, 11, 13, and 15, Railway-street on the west side of the street. Counsel put in a model of the premises and explained the situation to his Lordship. It was not disputed that the plaintiffs' windows were ancient lights, and the plaintiffs were seeking damages. The defendants completed part of their buildings last year, and in the present year they commenced a further extension. Thereupon the plaintiffs commenced the action and moved for an interlocutory injunction. On the hearing the defendants undertook not to carry their buildings higher than 38½ ft. The height of the old premises of the defendants varied from 18 ft. to 32 ft., and the plans under which they were now building showed that the height would be from 48 ft. to 52 ft. In addition, there was a gable 17 ft. high above that. It was only fair to say, however, that the defendants had offered not to proceed with the gable.

His Lordship: The new buildings are 14 ft. higher than the old ones?

Mr. Russell: Yes. It substantially comes to this: that the undertaking prevented them putting on the top story. The old buildings were nothing like as high as the street was wide, so that the diminution in light was considerable. He was claiming damages in respect of the buildings put up last year, and an injunction in respect of the buildings put up this year. The latter were commenced in July last, but had not exceeded 38 ft. in height.

Counsel then went into the details of the alleged infringement. The basements were seriously affected, the loss in percentage of angle of direct light being 40 per cent., 45 per cent., and 32 per cent. In the first case the room had been used for a colour printing machine, and artificial light was now necessary all day long. The ground floor had also suffered considerably, the percentages being 32 per cent., 49 per cent., and 31 per cent. The first-floor rooms were not so very much affected, but if the defendants' scheme was fully carried out they would suffer considerably.

Mr. Arthur William Cooksey, F.R.I.B.A., 6, Adam-street, Adelphi, W.C., architect and surveyor, detailed the result of his examination of the premises in conjunction with Mr. Monkman, of York. He saw the premises between 3 and 4 p.m. on October 24 on a very fine day. He had examined Mr. Monkman's plans and found them to be accurate.

Did you find that an angle of 45 degrees of light had been left?—Not on the ground floor and basement.

It is stated that the damage to the plaintiffs is inconsiderable, and would be compensated by a very small sum of money?—I think not. Even if the gable is omitted, in my opinion, substantial damage would be caused to the plaintiffs.

He had considered the question of depreciation in the value owing to the loss of light, and estimated that there would be a loss of 45*l*. to 50*l*. per annum in the letting value—say 900*l*. in capital value. If the gable was not proceeded with, he estimated the loss at 850*l*.

In cross-examination Mr. Cooksey said that another 2 ft. put on the defendants' buildings would make the basements very dingy. He had made various tests with coins and newspapers, and found that in the middle of the basement he could not read the latter.

Mr. Macnaghten: Would a further 12 ft. on the defendants' buildings materially affect the light to the ground and first floor windows?—Yes, to a considerable extent.

Mr. Thomas Monkman, of Meiklegate, York, corroborated Mr. Cooksey's evidence. He estimated that the loss in rental would be at least 40*l*. per annum. He was well acquainted with the premises, and with property in York generally.

In cross-examination witness admitted that he had not taken particular notice of the light coming to the back of the premises in question, where there was a glazed yard. That light did not, however, penetrate as far as the front of the premises.

Mr. Feargus Delittle, partner in the plaintiff firm, said that the light had greatly diminished in the rooms facing the defendants' premises since the defendants' buildings had been put up. They did not require a specially good light for the machine-rooms, and before the defendants' buildings were put up they had quite sufficient. Now, however, they had to use artificial light. The workmen did not like the artificial light, and if the machines had to be removed it would cost the firm about 50*l*.

In cross-examination Mr. Delittle said he did not admit that the premises were inconvenient, or that they had been contemplating removal to other premises. They could not work the machines safely without artificial light.

Mr. John Fenwick, also a partner in the plaintiff firm, gave evidence as to the diminution of light caused by the defendants' buildings. It first became noticeable when the elevation had reached the second floor. Afterwards, as the buildings progressed, it gradually got worse, until the basement and first floor were relatively in darkness. Witness had consulted a member of the Streets and Buildings Committee of the York Corporation, who gave him certain advice. He also consulted Mr. Monkman, who wrote to the Secretary of the defendant Society on the matter.

Having to use artificial light in the basement affected both the quality and quantity of the work done there.

In cross-examination Mr. Fenwick admitted that they had been trying to sell their premises for nine years, and had approached the defendants for that purpose.

Mr. R. J. Bond, a draper, and tenant of the plaintiffs, gave evidence with regard to the effect of the buildings on the light of his shop. He said he now had to use artificial light under circumstances which would not

have required it before the defendants' buildings were erected.

Four machinemen employed by the plaintiffs also gave evidence as to effect of the diminished light, and this closed the plaintiffs' case.

For the defence, Mr. Macnaghten, K.C., called Mr. E. Chatfield Clarke, F.R.I.B.A., of Bedford-row, W.C., who detailed the inspection of the plaintiffs' premises in October last. In Mr. Bond's shop he found no difficulty in reading his pocket-book, and it was possible to see colours quite well. In a room used by the plaintiffs for photographic purposes there were "floods of light." The basements had a reasonable light for ordinary purposes. They were deep basements, and even when the defendants' buildings were carried up to the full height proposed it would not, in his opinion, cause inconvenience to the plaintiffs so far as the ground and first floor were concerned. He thought the same amount of light would go through to the basements as before, though it would not penetrate so far into the room. He did not, however, consider that a material loss, having regard to the nature of the basement.

In cross-examination, Mr. Chatfield Clarke said that, in his opinion, the erection of the new buildings would not obscure so substantial an amount of light as to render the basements unfit for the use to which they were put.

Corroborative evidence was given by Mr. Sidney D. Kitson, F.R.I.B.A., of Leeds, who visited the plaintiffs' premises with the last witness. The ground-floor rooms were all well lighted, and in the basement there was the average amount of light. In Mr. Bond's shop he could read small print quite easily. In his opinion, even if defendants' buildings were carried to a height of 52 ft., there would be no material diminution of light. Of course, the basement would be more affected than the rest of the premises. As a rule, however, basements were not sufficiently well lighted for a printing business.

In cross-examination, Mr. Kitson agreed that to take 45 per cent. of light from the basement would, no doubt, affect it very much. Printing required a special light, and he would not think of using one for such a purpose. The ground-floor rooms were adequately lighted.

Mr. Henry Beck, senior partner in the firm of Messrs. Henry Beck & Son, architects, of Doncaster, also gave evidence. He was the architect for the defendants, and had been so since 1906. The front elevation was now 8 ft. above the pavement. The question of infringement of lights received very careful consideration before the buildings were proceeded with. In July last, before the defendants' buildings were put on, he noticed that the plaintiffs were using artificial light in one of their basements on a perfectly clear day.

Other evidence having been called for the defendants, Mr. Macnaghten, K.C., submitted that the plaintiffs had made out no case for an injunction, and if they were entitled to any relief, such relief should be a small sum by way of damages.

Mr. Bussell, K.C., for the plaintiffs, asked for 200*l.* damages in respect of the buildings completed last year, and an injunction in respect of the buildings erected during 1912.

His Lordship, in giving judgment, said that the defendants started to put on another story to their building, and from the evidence it appeared that there was no point between 39 ft. and 28 ft. at which they desired to stop building. He was satisfied that before the action was brought the defendants abandoned any intention of putting on the cable, and for the purposes of the action he did not consider the cable at all. The plaintiffs, in their business a printers, did not require especially good light—it was a case of ordinary light for the ordinary purposes of business. Messrs. Cooksey & Monkman had been called on behalf of the plaintiffs to particularise the extent of the injury. Mr. Chatfield Clarke, the architect called for the defendants, at first challenged Mr. Cooksey's estimate, but on consideration he accepted those sections, and his lordship said he therefore proposed to rely upon them for the purpose of his judgment. The question he had to consider was whether the obstruction of the plaintiffs' lights prevented them from carrying on their business in as comfortable and beneficial a manner as before.

His Lordship then reviewed the evidence, and, referring to the evidence of Mr. Chatfield Clarke, he said that that gentleman gave evidence of a startling character. The view taken by Mr. Clarke was that no matter to what extent the height of the new buildings was raised, it would cause no obstruction to the light of the plaintiffs' premises, but would only alter the direction of the light. He produced a diagram, showing the amount of volume of light coming to the premises, but he had to admit that his was a minimum view. Mr. Clarke also seemed to hold the view that so long as an angle of 50 degrees of light was left there would be no case of obstruction.

Mr. Beck took even a stronger view, his opinion being that no obstruction under 60 per cent. would seriously affect the building. Mr. Kitson's evidence was, in his Lordship's opinion, more reliable.

On the whole of the evidence his Lordship said he was satisfied that the plaintiffs had succeeded in proving a very serious loss of light, which was not only material and substantial, but which would render it very difficult, if not impossible, for them to carry on their business in as beneficial a manner as before the erection of the defendants' buildings. He awarded the plaintiffs 100*l.* damages in respect of the buildings erected last year. The buildings erected this year were a much more serious matter. In his Lordship's opinion, the plaintiffs had suffered an injury which could not be fairly compensated for by money, within the meaning of Lord Macnaghten's judgment in Colls *v.* Home and Colonial Stores, Ltd. He, therefore, granted an injunction in the form asked as regards the uncompleted buildings. The injunction would not prevent the defendants putting the roof on their buildings as they stood, but they must not put on the third story, which, in his opinion, would occasion a nuisance to the plaintiffs. The defendants must pay the costs of the action.

(OFFICIAL REFEREE'S COURT.)

(Before Mr. RICHARD POLLEN.)

Light and Air Claim against an Hotel: Anderson *v.* Waldeck.

JUDGMENT was delivered on November 4 in an action by Mrs. Harriet Anne Anderson, of 2, Queen's-square, wife of Mr. Hermann Anderson, against Mr. Harold Waldeck, the managing director of the Imperial Hotel, Ltd., and the Imperial London Hotels, Ltd., of Russell-square, consequent upon extensions carried out in connection with the hotel. This was a light and air claim by Mrs. Anderson as the owner of premises adjoining. In the course of the hearing certain heads of the claim were abandoned by Mrs. Anderson under the advice of her Counsel, those relating to alleged loss of custom and goodwill.

Mr. Cozens Wertheimer and Mr. Marston (instructed by Mr. J. J. Claymond) appeared for the plaintiff, and Mr. Cecil Walsh and Mr. Thomas (instructed by Messrs. Clowes, Hackley, & Co.) appeared for the defendants.

In the course of his judgment, after hearing the evidence, Mr. Pollen said that Mrs. Anderson, who lived in Bloomsbury, claimed damages for interference with light and air at her premises by the defendants; she also claimed an injunction and damages for trespass, because these premises were said to be a nuisance, and there was no justification in the proceeding of the defendants in putting them up. Mrs. Anderson who apparently had had these premises twenty years, was leaseholder under a repairing lease for 1,000 years, granted in 1715 at a ground rent of 12*l.* a year, and that condition of things was material as to the question of the value of the premises, and as to the amount of damage that had been done by the defendants. It had been admitted in effect that the defendants had done something which entitled the plaintiff to recover some amount of damage, and the question he had to decide was as to the amount to which Mrs. Anderson was entitled. He must say that he thought Mrs. Anderson's claim had been very greatly exaggerated. It was not in the least the fault of her advisers, who had been absolutely unaware of the business which Mrs. Anderson had carried on in this place, and they had accepted, as they were bound to do, her estimate of loss of custom and goodwill. The goodwill had been calculated on a certain basis which she said were the profits of her business. A claim based on the estimate of her statement as to the course of custom to be relied on had been advanced. It was quite clear to his mind—and he thought Mr. Wertheimer accepted the position—that in all probability Mrs. Anderson found that these premises were not suitable to let as ordinary lodgings. Therefore, it was quite obvious to his mind that her estimate of the custom she lost was based entirely upon the profits she said she made in this particular business. He doubted much whether she would have been able to substantiate that estimate, but that point was not now before him. Proceeding to deal with the points of the case before him, the Referee said that Mrs. Anderson had been very properly advised not to press for an injunction. It seemed to result in this, that by not pressing for an injunction she had in effect acquiesced in allowing the defendants to erect the building. He did not think she could say she ought to have more damages because she could have got an injunction. Therefore, he thought the damages were to be based only on the basis that they were an equivalent to the injunction, and not, therefore, a case in which she was entitled to an injunction and to have damages by reason of that fact. Having referred to the fact that the usual notice regarding party structure was given the plaintiff, the Referee dealt with the allegations of trespass. He said that, in his opinion, there was no foundation whatever for saying that Mrs. Anderson was entitled to treat the Hotel Company as a trespasser. He had to ask how much had really the value of the plaintiff's house been diminished, if at all, by the erection of this building by the defendants? It was quite obvious to his mind that the only rooms that had been at all interfered with within the legal rights were the basement and the ground floor. Ample light came in from the south to the basement. Upon the ground floor, too, there was a fair light, having regard to the occupation of those premises as a private house. One of the witnesses had taken the rooms at a certain value and calculated how far the light in the rooms had been interfered with, and how far that had depreciated the value of the premises, not only as rooms occupied separately, but as rooms occupied in connection with the whole house being occupied by the tenant. That estimate had been brought up to 100*l.* It might be that was a low estimate, at all events the defendants' witness thought it was rather a low estimate, and they had made it 200*l.* (a change 200*l.* was a very handsome sum to be paid in respect of depreciation). The Referee then reviewed the various items and proceeded to express the opinion that the work executed by the defendants had been done extraordinarily expeditiously and properly. Upon the evidence it had been shown that no obstruction had taken place. There was not the slightest chance of any settlement taking place in these premises as the result of any of the work executed by the defendants. That settlement might occur from the abstract view and the exact age of the premises was quite possible but that was a thing for which the defendant company was not responsible. There would be judgment for the defendants, as the amount paid into Court by them was more than sufficient to satisfy the plaintiff's claim. 5*l.* in Court would be paid out to the defendants, and the balance would remain in Court pending taxation of costs. Defendants would pay the costs up to the date of payment into Court, except as to about nine items, and the plaintiff would have to pay all the costs after the payment in.

(SPECIAL REFEREE.)

(Before Mr. Justice PHILLIMORE.)

Heavy Claim by and against Contractors: J. Aird & Co. *v.* the Tanjong Pagar Dock Board.

The hearing was resumed of this case last week in which the plaintiffs claim from the defendants 500,000*l.* as damages for alleged breach of contract in connection with the construction of a wet dock at Singapore. Plaintiffs, who are the well-known contractors, allege that the defendants misrepresented the conditions under which the contract was to be carried out, and therefore that they were justified in repudiating the contract. Defendants denied those allegations, and served a notice on the executors of the late Sir John Aird, who in his lifetime was a member of the plaintiff firm and a party to the contract, making a claim against his estate of about 1,600,000*l.* as damages for breach of contract.

Mr. Upjohn, K.C., Mr. Macassey, K.C., and Mr. Schwann appeared for the plaintiffs, and Sir R. Finlay, K.C., Mr. George Cave, K.C., Mr. Renner, K.C., Sir Hugh Fort, Mr. Mathews, and Mr. Hull for the defendants.

Mr. Sidney Walker, engineer, said he was engaged on the Tanjong Pagar Dock for a year, from September, 1909, as timberman ganger, and he had some of the supervision of pile driving. In his opinion, the white supervision over the natives was sufficient. Over him was a walking ganger, a subagent over the whole work, who visited him every day, and sometimes two or three times a day. This was his first experience in the East, and, as he had just arrived from England, he thought, naturally, that if they had English men to do the timbering they could do anything. After the English timbermen arrived, if anything, the work was done quicker than it was by the Chinamen. The bottom of a trench in Singapore was decidedly not the place for an Englishman to work in. The mud was "like a handful of grease." The shale they first encountered was too soft for the engineers to accept as a foundation for the wall, although it was too hard to allow the piles to enter, and it had to be excavated. They attempted to drain the pockets, and

them to pay for them. On that issue the learned Judge entered judgment for the plaintiffs with costs, the defendants getting costs on the issues on which the plaintiffs had not succeeded. Mr. Ward was not a party to the action, so it was a question of whether the builders or the building owners should pay.

After some discussion Lord Justice Williams said: It is plain there was a difficult question to be answered here, yet the plaintiffs asked for summary judgment without a trial. They say they believe there is no defence to the action. I can only say that is most improper, and if I were the Judge in chambers, and the summons had come before me, I should not only dismiss the summons, but I should order the plaintiffs to pay the costs in any event, and should see if I could not make the solicitors pay too.

Mr. Eames, for the respondents (plaintiffs), said at the time the matter was in chambers his clients were unaware of the facts disclosed in Court that day.

Mr. Radcliffe said the architect ordered the metalwork, or a great deal of it, purporting to act on behalf of the contracting builder. But the architect had no authority to do that. They were extras, and the contractor was not responsible for them. Under no circumstances could his clients be held responsible. Mr. Justice Hamilton said: "If Mr. Ward is not your agent, you have had these things—they have been fixed in your house, and that is an implied contract." The contractor was not bound to supply these goods, and the architect had no authority from them to order them. They were certainly affixed by a workman of his clients, but that was by order of the architect.

Lord Justice Buckley: Did Mr. Ward give evidence at the trial?

Mr. Eames: Yes; but he was not a party to the action.

Mr. Radcliffe said what the architect should have done was to tell the contractors what things were needed and let him obtain them.

Mr. Eames said the defendants had had their goods and used them, and should pay for them. They took the benefit of them as though they were supplied under the contract. It was inferred the goods would be paid for by Messrs. Chessum. His learned friend was wrong in suggesting that the architect had done something wrong, but in the Court below Counsel for the defendants (Mr. Scott) formally admitted that they knew of the goods, that they were seen on the premises, and that they were ordered by contract. It was also admitted that they were goods treated as coming under the contract. The defendants further admitted that Mr. Ward had done nothing wrong, and the only ground on which the defendants objected to pay was that they had not been paid by the building owners. In regard to that, the sum due to his clients was included in a certificate the architect gave for 1,500*l*. There was, he submitted, authority under the contract for Mr. Ward to order the goods. There was good cause for the action because money had been received.

Lord Justice Kennedy: I did not understand that money had been received.

Mr. Eames: Oh, yes! In fact, there were bills which were treated as cash. If you take a negotiable instrument and treat it between yourself and the debtor as cash that renders you liable for money had and received, although as a negotiable instrument it has never been met. Continuing, Counsel said he wished to correct an error that was made the previous day. It was said that at the time the orders were given the Cinematograph Company was in financial difficulties. That was a misapprehension, because, so far as the first lot of good was concerned, amounting in value to 118*l*., most of the orders were given as early as April, 1910, before the architect or the builders had any idea that financial difficulties would arise. In desiring to lay the whole facts before the Court, he wished to say that the plaintiffs were not a business firm in the ordinary sense, but high-class dealers and experts. They had been accustomed to accepting Mr. Ward's orders and crediting the contractors with the items, though the first invoice in these particular transactions was made out to Mr. Ward.

Lord Justice Williams: Is not that *prima facie* evidence that Mr. Ward is liable?

Mr. Eames said it could hardly be called an invoice; it was a memo. that the goods were supplied to Mr. Ward's order.

Lord Justice Williams, in delivering judgment, said the appeal of the defendants must be allowed, and the cross appeal dismissed. He agreed with Mr. Justice Hamilton in so far as he dealt with the subsidiary questions that had been argued, but he differed on the chief point. In his opinion, the architect did not act in the character of an agent for the contractor. That being so, the question naturally arose, when the architect gave the order, had he entered into a contract on behalf of the building owner? He was not prepared to come to the conclusion that he did act as the agent in giving the order in the sense that he made a contract on behalf of the building owner, or even of the contractor. There was no proof here that he acted as the agent, authorised as such, for either the building owner or the contractor. If there was no contract on behalf of the contractor through Mr. Ward they had to see whether, under these circumstances, the contractor used the goods supplied in such a way as to imply on the part of the contractor a promise to pay or a responsibility to do so. In his opinion, they should not assume that. During the arguments in the case it had been said that the architect had twice given orders. But it did not matter how many times he had done that. What they had to consider was, when these goods were delivered at the theatre was there anything to tell the contractor that they had been ordered on his behalf, or that they had been ordered for his benefit and by his order, so that he could use them if he thought fit or reject them if he thought fit? There was no evidence to show that the contractor had any such information. They might have been sent by order of the building owner. There certainly was nothing to indicate to the contractor that he was liable for them. There was no information as to price, specifications, or conditions. He had a right to all that information, but it was not given to him. It had been said that it was the duty of the contractor, when he saw the goods, to ask for that information and to avail himself of the opportunity, if he chose, of knowing what was happening. In his opinion, the architect, if the contractor was to be held liable, should have given him all that information. It was said the contractor ought to have known these things and where the goods came from, but if there was any evidence of that it was of the faintest description.

Lord Justice Buckley concurred.

Lord Justice Kennedy dissented. He agreed with everything said and done by Mr. Justice Hamilton. The contractors had used the goods of the plaintiffs, and they should pay for them. They could not expect that the goods were a gift. They had the opportunity of using or refusing them, and they used them, and that made them liable.

By a majority of the Court the appeal of the defendants was allowed and the cross appeal dismissed.

CHANCERY DIVISION.

(Before Mr. Justice SWINFEN EADY.)

Ancient Lights at York:

Delittle, Fenwick, & Co. *v.* York Industrial Co-operative Society, Ltd.

THIS case was heard on November 4, 5, and 6, and was a claim by the plaintiffs for an injunction to restrain the defendants, their servants and agents, from so erecting premises in Railway-street, York, as to obstruct the access of light and air to the plaintiffs' ancient windows, and thereby cause a nuisance, and for damages.

Hon. Frank Russell, K.C., and Mr. J. M. Gover (instructed by Messrs. Ridsdale & Son, agents for Messrs. George Crombie & Son, of York) were for the plaintiffs; and the defendants were represented by the Hon. E. C. Macnaghten, K.C., and Mr. F. H. Maugham (instructed by Messrs. Munns & Longden, agents for Mr. F. A. Camidge, of York).

In opening the case, Mr. Russell said that the property of the parties was on opposite sides of Railway-street, York. It was a narrow street, 42 ft. in width, which approximately ran north and south. The plaintiffs were printers, and they owned Nos. 5, 7, 9, 11, 13, and 15, Railway-street on the west side of the street. Counsel put in a model of the premises and explained the situation to his Lordship. It was not disputed that the plaintiffs' windows were ancient lights, and the plaintiffs were seeking damages. The defendants completed part of their buildings last year, and in the present year they commenced a further extension. Thereupon the plaintiffs commenced the action and moved for an interlocutory injunction. On the hearing the defendants undertook not to carry their buildings higher than 38½ ft. The height of the old premises of the defendants varied from 18 ft. to 32 ft., and the plans under which they were now building showed that the height would be from 48 ft. to 52 ft. In addition, there was a gable 17 ft. high above that. It was only fair to say, however, that the defendants had offered not to proceed with the gable.

His Lordship: The new buildings are 14 ft. higher than the old ones?

Mr. Russell: Yes. It substantially comes to this: that the undertaking prevented them putting on the top story. The old buildings were nothing like as high as the street was wide, so that the diminution in light was considerable. He was claiming damages in respect of the buildings put up last year, and an injunction in respect of the buildings put up this year. The latter were commenced in July last, but had not exceeded 38 ft. in height.

Counsel then went into the details of the alleged infringement. The basements were seriously affected, the loss in percentage of angle of direct light being 40 per cent., 45 per cent., and 32 per cent. In the first case the room had been used for a colour printing machine, and artificial light was now necessary all day long. The ground floor had also suffered considerably, the percentages being 32 per cent., 49 per cent., and 31 per cent. The first-floor rooms were not so very much affected, but if the defendants' scheme was fully carried out they would suffer considerably.

Mr. Arthur William Cooksey, F.R.I.B.A., 6, Adam-street, Adelphi, W.C., architect and surveyor, detailed the result of his examination of the premises in conjunction with Mr. Monkman, of York. He saw the premises between 3 and 4 p.m. on October 24 on a very fine day. He had examined Mr. Monkman's plans and found them to be accurate.

Did you find that an angle of 45 degrees of light had been left?—Not on the ground floor and basement.

It is stated that the damage to the plaintiffs is inconsiderable, and would be compensated by a very small sum of money?—I think not. Even if the gable is omitted, in my opinion, substantial damage would be caused to the plaintiffs.

He had considered the question of depreciation in the value owing to the loss of light, and estimated that there would be a loss of 45*l*. to 50*l*. per annum in the letting value—say 900*l*. in capital value. If the gable was not proceeded with, he estimated the loss at 850*l*.

In cross-examination Mr. Cooksey said that another 2 ft. put on the defendants' buildings would make the basements very dingy. He had made various tests with coins and newspapers, and found that in the middle of the basement he could not read the latter.

Mr. Macnaghten: Would a further 12 ft. on the defendants' buildings materially affect the light to the ground and first floor windows?—Yes, to a considerable extent.

Mr. Thomas Monkman, of Micklegate, York, corroborated Mr. Cooksey's evidence. He estimated that the loss in rental would be at least 40*l*. per annum. He was well acquainted with the premises, and with property in York generally.

In cross-examination witness admitted that he had not taken particular notice of the light coming to the back of the premises in question, where there was a glazed yard. That light did not, however, penetrate as far as the front of the premises.

Mr. Feargus Delittle, partner in the plaintiff firm, said that the light had greatly diminished in the rooms facing the defendants' premises since the defendants' buildings had been put up. They did not require a specially good light for the machine-rooms, and before the defendants' buildings were put up they had quite sufficient. Now, however, they had to use artificial light. The workmen did not like the artificial light, and if the machines had to be removed it would cost the firm about 50*l*.

In cross-examination Mr. Delittle said he did not admit that the premises were inconvenient, or that they had been contemplating removal to other premises. They could not work the machines safely without artificial light.

Mr. John Fenwick, also a partner in the plaintiff firm, gave evidence as to the diminution of light caused by the defendants' buildings. It first became noticeable when the elevation had reached the second floor. Afterwards, as the buildings progressed, it gradually got worse, until the basement and first floor were relatively in darkness. Witness had consulted a member of the Streets and Buildings Committee of the York Corporation, who gave him certain advice. He also consulted Mr. Monkman, who wrote to the Secretary of the defendant Society on the matter.

Having to use artificial light in the basement affected both the quality and quantity of the work done there.

In cross-examination Mr. Fenwick admitted that they had been trying to sell their premises for nine years, and had approached the defendants for that purpose.

Mr. R. J. Bond, a draper, and tenant of the plaintiffs, gave evidence with regard to the effect of the buildings on the light of his shop. He said he now had to use artificial light under circumstances which would not

have required it before the defendants' buildings were erected.

Four machinemen employed by the plaintiffs also gave evidence as to effect of the diminished light, and this closed the plaintiffs' case.

For the defence, Mr. Macnaghten, K.C., called Mr. H. Chatfeild Clarke, F.R.I.B.A., of Bishopsgate, E.C., who detailed the inspection of the plaintiffs' premises in October last. In Mr. Bond's shop he found no difficulty in reading his pocket-book, and it was possible to test colours quite well. In a room used by the plaintiffs for photographic purposes there were "floods of light." The basements had a reasonable light for ordinary purposes. They were deep basements, and even when the defendants' buildings were carried up to the full height proposed it would not, in his opinion, cause inconvenience to the plaintiffs so far as the ground and first floor were concerned. He thought the same amount of light would go through to the basements as before, though it would not penetrate so far into the room. He did not, however, consider that a material loss, having regard to the nature of the basement.

In cross-examination, Mr. Chatfeild Clarke said that, in his opinion, the erection of the new buildings would not obscure so substantial an amount of light as to render the basements unfit for the use to which they were put.

Corroborative evidence was given by Mr. Sidney D. Kitson, F.R.I.B.A., of Leeds, who visited the plaintiffs' premises with the last witness. The ground-floor rooms were all well lighted, and in the basement there was the average amount of light. In Mr. Bond's shop he could read small print quite easily. In his opinion, even if defendants' buildings were carried to a height of 52 ft., there would be no material diminution of light. Of course, the basement would be more affected than the rest of the premises. As a rule, however, basements were not sufficiently well lighted for a printing business.

In cross-examination, Mr. Kitson agreed that to take 48 per cent. of light from the basement would, no doubt, affect it very much. Printing required a special light, and he would not think of using one for such a purpose. The ground-floor rooms were adequately lighted.

Mr. Henry Beck, senior partner in the firm of Messrs. Henry Beck & Son, architects, of Doncaster, also gave evidence. He was the architect for the defendants, and had been so since 1908. The front elevation was now 38 ft. above the pavement. The question of infringement of lights received very careful consideration before the buildings were proceeded with. In July last, before the defendants' buildings were put up, he noticed that the plaintiffs were using artificial light in one of their basements on a perfectly clear day.

Other evidence having been called for the defendants, Mr. Macnaghten, K.C., submitted that the plaintiffs had made out no case for an injunction, and if they were entitled to any relief, such relief should be a small sum by way of damages.

Mr. Russell, K.C., for the plaintiffs, asked for 200*l.* damages in respect of the buildings completed last year, and an injunction in respect of the buildings erected during 1912.

His Lordship, in giving judgment, said that the defendants desired to put on another story to their building, and from the evidence it appeared that there was no point between 38 ft. and 25 ft. at which they desired to stop building. He was satisfied that before the action was brought the defendants abandoned any intention of putting on the gable, and for the purposes of the action he did not consider the gable at all. The plaintiffs, in their business as printers, did not require especially good light—it was a case of ordinary light for the ordinary purpose of business. Messrs. Cooksey & Monkman had been called on behalf of the plaintiffs to particularise the extent of the light lost. Mr. Chatfeild Clarke, the architect called for the defendants, at first challenged Mr. Cooksey's sections, but on consideration he accepted those sections, and his Lordship said he therefore proposed to rely upon them for the purpose of his judgment. The question he had to consider was whether the obstruction of the plaintiffs' lights prevented them from carrying on their business in as comfortable and beneficial a manner as before.

His Lordship then reviewed the evidence, and, referring to the evidence of Mr. Chatfeild Clarke, he said that that gentleman gave evidence of a startling character. The view taken by Mr. Clarke was that no matter to what extent the height of the new buildings was raised, it would cause no obstruction to the light of the plaintiffs' premises, but would only alter the direction of the light. He produced a diagram, showing the amount or volume of light coming to the premises, but he had to admit that his was a mistaken view. Mr. Clarke also seemed to hold the view that so long as an angle of 50 degrees of light was left there would be no case of obstruction.

Mr. Beck took even a stronger view, his opinion being that no obstruction under 60 per cent. would seriously affect the building. Mr. Kitson's evidence was, in his Lordship's opinion, more reliable.

On the whole of the evidence his Lordship said he was satisfied that the plaintiffs had succeeded in proving a very serious loss of light, which was not only material and substantial, but which would render it very difficult, if not impossible, for them to carry on their business in as beneficial a manner as before the erection of the defendants' buildings. He awarded the plaintiffs 100*l.* damages in respect of the buildings erected last year. The buildings erected this year were a much more serious matter. In his Lordship's opinion, the plaintiffs had suffered an injury which could not be fairly compensated by money, within the meaning of Lord Macnaghten's judgment in Colls *v.* Home and Colonial Stores, Ltd. He, therefore, granted an injunction in the form asked as regards the uncompleted buildings. The injunction would not prevent the defendants putting the roof on their buildings as they stood, but they must not put on the third story, which, in his opinion, would occasion a nuisance to the plaintiffs. The defendants must pay the costs of the action.

OFFICIAL REFEREE'S COURT.
(Before Mr. EDWARD POLLOCK.)

Light and Air Claim against an Hotel: Anderson *v.* Walduck.

JUDGMENT was delivered on November 4 in an action by Mrs. Harriet Anne Anderson, of 2, Queen's-square, wife of Mr. Rasmus Anderson, against Mr. Harold Walduck, the managing director of the Imperial Hotel, Ltd., and the Imperial London Hotels, Ltd., of Russell-square, consequent upon extensions carried out in connexion with the hotel. This was a light and air claim by Mrs. Anderson, as the owner of premises adjoining. In the course of the hearing certain heads of the claim were abandoned by Mrs. Anderson, under the advice of her Counsel, those relating to alleged loss of custom and goodwill.

Mr. Conway Wertheimer and Mr. Marston (instructed by Mr. J. J. Chapman) appeared for the plaintiff, and Mr. Cecil Walsh and Mr. Thomas (instructed by Messrs. Clowes, Heckley, & Co.) appeared for the defendants.

In the course of his judgment, after hearing the evidence, Mr. Pollock said that Mrs. Anderson, who lived in Bloomsbury, claimed damages for interference with light and air at her premises by the defendants; she also claimed an injunction and damages for trespass, because these premises were said to be a nuisance, and there was no justification in the proceeding of the defendants in putting them up. Mrs. Anderson, who apparently had had these premises twenty years, was leaseholder under a repairing lease for 1,000 years, granted in 1715 at a ground rent of 12*l.* a year, and that condition of things was material as to the question of the value of the premises, and as to the amount of damage that had been done by the defendants. It had been admitted in effect that the defendants had done something which entitled the plaintiff to recover some amount of damage, and the question he had to decide was as to the amount to which Mrs. Anderson was entitled. He must say that he thought Mrs. Anderson's claim had been very greatly exaggerated. It was not in the least the fault of her advisers, who had been absolutely unaware of the business which Mrs. Anderson had carried on in this place, and they had accepted, as they were bound to do, her estimate of loss of custom and goodwill. The goodwill had been calculated on a certain basis which she said were the profits of her business. A claim based on the estimate of her statement as to the course of custom to be relied on had been advanced. It was quite clear to his mind—and he thought Mr. Wertheimer accepted the position—that in all probability Mrs. Anderson found that these premises were not suitable to let as ordinary lodgings. Therefore, it was quite obvious to his mind that her estimate of the custom she lost was based entirely upon the profits she said she made in this particular business. He doubted much whether she would have been able to substantiate that estimate, but that point was not now before him. Proceeding to deal with the phases of the case before him, the Referee said that Mrs. Anderson had been very properly advised not to press for an injunction. It seemed to result in this, that by not pressing for an injunction she had, in effect, acquiesced in allowing the defendants to erect ...s building. He did not think she could say she ought to have more damages because she could have got an injunction. Therefore, he thought the damages were to be based only on the basis that they were an alternative to the injunction, and not, therefore, a case in which she was entitled to an injunction, and to have increased damages by reason of that fact. Having referred to the fact that the usual notice regarding party structure was given the plaintiff, the Referee dealt with the allegations of trespass. He said that, in his opinion, there was no foundation whatever for saying that Mrs. Anderson was entitled to treat the Hotel Company as a trespasser. He had to ask how much had really the value of the plaintiff's house been diminished, if at all, by the erection of this building by the defendants? It was quite obvious to his mind that the only rooms that had been at all interfered with within the legal rights were the basement and the ground floor. Ample light came in from the south to the basement. Upon the ground floor, too, there was a fair light, having regard to the occupation of these premises as a living-room. One of the witnesses had taken the rooms at a certain value and calculated how far the light in the rooms had been interfered with, and how far that had depreciated the value of the premises, not only as rooms occupied separately, but as rooms occupied, having regard to the whole house being occupied by the tenant. That estimate had been brought up to 100*l.* It might be that was a low estimate; at all events, the defendants' advisers thought it was rather a low estimate, and they had made it 200*l.* He thought 200*l.* was a very handsome sum to be paid in respect of depreciation. The Referee then reviewed the various items, and proceeded to express the opinion that the work conducted by the defendants had been done extraordinarily carefully and properly. Upon the evidence it had been shown that no subsidence had taken place. There was not the slightest chance of any settlement taking place in these premises as the result of any of the work executed by the defendants. That settlement might occur from the inherent vice and the great age of the premises was quite possible, but that was a thing for which the defendant company was not responsible. There would be judgment for the defendants, as the amount paid into Court by them was more than sufficient to satisfy the plaintiff's claim; 5*l.* in Court would be paid out to the defendants, and the balance would remain in Court pending taxation of costs. Defendants would pay the costs up to the date of payment into Court, except as to about nine items, and the plaintiff would have to pay all the costs after the payment in.

CHANCERY DIVISION.
(Before Mr. Justice PARKER.)

Heavy Claim by and against Contractors: J. Aird & Co. *v.* the Tanjong Pagar Dock Board.

THE hearing was resumed of this case last week in which the plaintiffs claim from the defendants 500,000*l.* as damages for alleged breach of contract in connexion with the construction of a wet dock at Singapore. Plaintiffs, who are the well-known contractors, allege that the defendants misrepresented the conditions under which the contract was to be carried out, and therefore that they were justified in repudiating the contract. Defendants denied these allegations, and served a notice on the executors of the late Sir John Aird, who in his lifetime was a member of the plaintiff firm and a party to the contract, making a claim against his estate of about 1,000,000*l.* as damages for breach of contract.

Mr. Upjohn, K.C., Mr. Macassey, K.C., and Mr. Schwann appeared for the plaintiffs; and Sir R. Finlay, K.C., Mr. George Cave, K.C., Mr. Romer, K.C., Sir Hugh Fort, Mr. Mathews, and Mr. Hull for the defendants.

Mr. Sidney Walker, engineer, said he was engaged on the Tanjong Pagar Dock for a year, from September, 1909, as timberman ganger, and he had some of the supervision of pile driving. In his opinion, the white supervision over the natives was sufficient. Over him was a walking ganger, a subagent over the whole work, who visited him every day, and sometimes two or three times a day. This was his first experience in the East, and, as he had just arrived from England, he thought, naturally, that if they had Englishmen to do the timbering they could do anything. After the English timbermen arrived, if anything, the work was done quicker than it was by the Chinamen. The bottom of a trench in Singapore was decidedly not the place for an Englishman to work in. The mud was "like a handful of grease." The shale they first encountered was too soft for the engineers to accept as a foundation for the wall, although it was too hard to allow the piles to enter, and it had to be excavated. They attempted to drain the pockets, and

constructed a sump for the pump to hang in. They also tried to make channels across to the pump, but it was like trying to make a channel in water; the stuff was very little thicker. A scaffold was erected for the men to work on, and as soon as a Chinaman stepped off he was "in the mud" up to his knees. It was impossible to mould a handful of the mud or to hold a handful of it. In the trench at the east entrance to the dock the mud was of the consistency of soft soap—so long as it was left alone.

Mr. J. S. Gaskell, civil engineer and member of the Institution of Civil Engineers, now in practice as consulting engineer at Victoria-street, Westminster, said he had been chiefly engaged in designing and engineering of dock work in this country and in the East. He was resident engineer of the dock works at Calcutta from 1886 to 1891. On that work there were 2½ miles of dock wall built in timber trenches in mud. Witness said he was chief engineer of the Surrey Commercial Dock Company until the Port Authority took it over. In February, 1910, he was retained by Messrs. Aird, as an independent engineer, to proceed to Singapore and make a thorough inspection of the work at the Tanjong Pagar Docks. He went out and made the inspection. He found that the western trench had been opened out as a trench for 280 ft., the greatest depth being about 22 ft. He made a very careful consideration of the timbering and pile driving, and everything connected with the work. The timbering had a rough appearance, owing perhaps to the timber being hewn, but it was evidently very sound and substantial and well put together. The sheeting was of the usual heavy size. He formed the opinion that it was quite sufficient for the purpose which it was intended to fulfil. Witness carefully examined the mud and found it was of a very treacherous character. He saw it in varying circumstances and under all working conditions, and he found it impossible to walk upon it. The coolies had to walk on planks. When it was raised by the steam navvy it had the movement of a huge mass of dough. Looking at the maps put in, witness said there were always local faults in timbering, but they did not indicate that the work was generally faulty.

Mr. M. B. Friedberger, a civil engineer, gave evidence that the plaintiffs had an enormous amount of plant on the works, the value of which must have run into six figures. He said that most of the plant was modern, and all of it was kept in a proper state of repair. He considered that the plant was adequate for the purpose of carrying out the contract. The defects shown on the photograph were not due to inferior workmanship, but to the pressure of the mud. During the fifteen months he was on the works the average number of men employed was one European to forty-eight natives, and he considered that a reasonable amount of supervision.

[The case had not concluded as we went to press.]

LONDON COUNCILS.

Acton.—The tenders of Mr. H. Morecroft, of Acton, has been accepted, at 313*l.* and 287*l.*, for resurfacing the carriageways of Montague-gardens and Oakley-avenue respectively with tar macadam.

Hornsey.—The tender of the Praed Road Construction Syndicate, Ltd., has been accepted at 3,072*l.* 10*s.* for repairs to Fortis-green, Fortis Green-road, and part of Colney Hatch-lane. At the meeting of the Council last week the opinion of Mr. Macmorran, K.C., on the question of the liability of the London General Omnibus Company in respect of the motor-'bus traffic along roads in the borough was given. Mr. Macmorran states that he thinks there is justification for the suggestion that the motor-omnibus traffic over such a road as Fortis-green is extraordinary traffic within the meaning of the statute, and that the omnibus company may be made liable in respect of it, partly because it is of the character and description which is quite new to a road like Fortis-green, and partly because it is exceptional in the frequency of the journeys over the road. The company, therefore, are to be asked to make a contribution towards the repair of the roads mentioned, and informed that, in the case of their not doing so, they will be held liable for the expenses. Plans have been passed for Mr. George Taft, Turnpike-lane, for four houses in Rokesby-avenue, and for Mr. Charles Tucker, Southern-road, Muswell-hill, for houses in Fordington-road, Muswell-hill.

Middlesex.—At the meeting of the County Council last week a proposal by the Highways Committee was approved for widening the Brent Bridge, Hendon, at an estimated cost of 4,755*l.* The existing bridge, the Committee stated, which is built entirely of bricks, and has a width of only 28 ft. between the parapet walls, with a carriageway of 20 ft., is now quite inadequate for the needs of the present traffic, which has, during the last few years, increased to a very material extent. The scheme provides for the widening of the bridge and approaches for a distance of 300 ft. on either side to a width of 50 ft. The widened portion (on either side) will be constructed with longitudinal steel girders and decking. The same Committee also reported having had under consideration a communication from the Twickenham Urban District Council covering a copy of a resolution adopted by them pointing out the inadequacy of Richmond Bridge to serve the present traffic, and urging the County Council to take the matter into consideration so as to obtain further powers for the Commissioners, or for the transfer of such powers. The Committee had also considered a communication from the Society for the Protection of Ancient Buildings, protesting against any alteration of the existing bridge, also a letter from the Bridge Commissioners addressed to the Twickenham authority, intimating that they had neither the power nor the funds to carry out the proposed reconstruction of the bridge. The Committee recommended that intimation should be given to the Twickenham Council and the Society for the Protection of Ancient Buildings that the County Council is now expending, in conjunction with the Surrey County Council, a large sum of money in widening Kingston Bridge, but that at a later date they (the Middlesex authority) may communicate with the Surrey County Council with regard to the widening or construction of other bridges over the Thames. Mr F. Ayland moved that the recommendation be referred back, because he believed the Committee put this recommendation forward in this way because they would not take the responsibility of initiating so expensive a scheme as that of a new bridge across the Thames. The improvement or reconstruction of Richmond Bridge was generally admitted to be one of the most urgent and important questions in South Middlesex, as the traffic had very largely increased. The general notion seemed to be that it was necessary to rebuild the bridge, which would entail a very heavy outlay, but an improvement which would go far to meet present needs could be carried out for a few thousand pounds. It seemed to him that something should be done to widen the centre spans of the bridge. After further discussion the matter was referred back to the Committee in order that they might obtain further information. The Asylums Committee reported that they had found in practice that additional accommodation was required for the female staff at the Napsbury Asylum. They state that the nurses' rooms provided in the recent extensions are insufficient for proper administration, nor is there sufficient room for the extra domestic staff required. There were also no messrooms, recreation-rooms, or staff scullery accommodation, which are now found to be essential. The existing accommodation in the upholsterer's shop and hair-picking room is also quite inadequate, and, further, a residence should be provided on the estate for the Assistant Medical officer. The Committee requested the architect, Mr. Rowland Plumbe, to prepare plans of the works proposed to be carried out, and which they recommended the Council to approve. The whole cost of the work is put at 6,461*l.* The Committee also consider it desirable to build six additional cottages for garden labourers, the cost of which, according to the estimate of the County Surveyor, would amount to 1,235*l.* The Committee's proposals were agreed to. The County Buildings Committee reported that at the time of the excavation for the foundations of the new Guildhall the architect had drawn attention to the fact that it had been found necessary to excavate some 2 ft. deeper than had been anticipated in order to find a satisfactory foundation for the new building, and that this alteration in the depth to which the foundations were to be taken would cause extra cost in excavation, concrete, and walling. It is not possible to ascertain the additional cost of the extra work to the foundations, but the quantity surveyors estimate the extra cost at about 3,500*l.* The lowering of the foundations has allowed the height of the rooms on the basement floor to be increased by some 2½ ft. to 3 ft. In consequence of the lowering of the basement level the architect advises the installation of a Shone ejector, at a cost of 1,500*l.*, to deal with the sewage, so as to prevent any risk of flooding from the public sewers. The Committee recommended the Council to adopt the architect's advice. This was also agreed to.

Poplar.—Plans have been passed for Mr. W. G. Jackson and Messrs. Harry Hooper & Co., for the erection of a factory in British-street, Millwall, for the D.B.P. Syndicate, and for additions to Nos. 1 to 10, Marsh-street, respectively.

Southgate.—The Surveyor has been instructed to report upon the additional repairs to the main roads in the district necessitated by the motor-omnibus traffic, and, at the same time, to submit an estimate for paving with wood blocks the unpaved portion of Green-lanes and a portion of the Southgate main road.

Wandsworth.—A plan by the Borough Engineer has been approved for paving works proposed to be carried out in connexion with the widening of Putney-hill. The estimated cost is put at 330*l.* Channelling, kerbing, etc., works are to be executed in various roads in the Borough at an estimated cost of 1,561*l.* Tenders are to be invited for paving part of Southcroft-road, Streatham, as a new street. The tenders of Messrs. H. Woodham & Sons, at 255*l.* and 227*l.*, have been accepted for carrying out repair work in portions of Wimbledon Park-road and Viewfield-road, Southfields, respectively. A plan has been passed for Mr. W. Saint for the erection of St. Thomas's Church Hall in Telferscot and Radbourne roads, Balham; also for Messrs. G. Godson & Sons, for additions to St. Gregory's Presbytery, Garratt-lane, Dunts-hill, Springfield.

Watford.—Application is to be made to the Local Government Board by the Guardians for sanction to the carrying out of a scheme for increasing the accommodation at the work-house. The cost of the work is estimated at 250*l.*

Wimbledon.—A surface-water sewer is to be laid along Park-side and Queensmere-road, at an estimated cost of 175*l.* Plans submitted by the Borough Surveyor have been approved for making up Marryat-road as a new street. The estimated cost is put at 2,182*l.* A further plan by the Surveyor has also been approved providing for an additional ward at the Isolation Hospital, at an estimated cost of 4,000*l.* Plans have been passed as follows:—Mr. E. Potterton, additions to "Redruff," Marryat-road; Mr. R. J. Thomson, alterations to Nos. 30 and 31, Broadway; Messrs. Bishop Bros., eight houses, Vineyard-hill. A plan has been lodged by Mr. T. W. Moss for alterations at "Hillbrow," Murray-road.

PATENTS.

APPLICATIONS PUBLISHED.*

21,743 of 1911.—Joseph Collinson Currah: Domestic ranges or the like.

21,999 of 1911.—Rookes Evelyn Bell Crompton and Nigel George Crompton: Machines for laying down and spreading road materials.

22,671 of 1911.—Dr. Casimir Nowotny and Gregar Franz Beltowski: Door locks.

25,194 of 1911.—Alfred Owram: Extending ladder.

25,510 of 1911.—Thomas Coates and Mary Ann Coates: Scrapers for mortar mills.

26,051 of 1911.—Aimé Blanc: Devices for use in connexion with indicating or regulating temperatures of rooms or the like.

26,499 of 1911.—Henry Mann Roberts: Form of step-ladder.

27,418 of 1911.—George William Blackburn: Motor-driven road-sweeping machines.

27,586 of 1911.—Emil Scharer: Scaffolding for buildings.

27,865 of 1911.—W. Brandon & Co., Ltd., and William Brandon: Cooking-stoves.

28,857 of 1911.—Alfred Julius Boult (the Master Builders' Company): Method of binding new cement to existing cement or like structures.

2,972 of 1912.—Joseph Hubers (Heinrich Bruning): Method of impregnating wood.

3,056 of 1912.—Emanuel Myers Domb: Gate springs.

7,397 of 1912.—Lepton Dobson Sunderland and Charles Stanley Pickles: Roof glazing.

9,926 of 1912.—Edwin Elliott and Anthony Bertlin: Manufacture of ornamental tiles.

10,213 of 1912.—Albert Giblin: Flushing cisterns.

10,879 of 1912.—Charley Nathon Morris and Mrs. Nancy Catherine Callaghan: Door locks.

11,804 of 1912.—Hans Hinker: Double window.

12,307 of 1912.—John Thomas: Apparatus for extinguishing fires in vessels and buildings.

12,324 of 1912.—Dr. Phil Bela Lach: Process for the manufacture of artificial wood.

12,893 of 1912.—George Barker (Frank Albe Lane, Ada Ella Martinsen, and Carl Henry Crawford, United States): Construction and erection of concrete or other walls or structures.

*All these applications are in the stage in which opposition to the grant of Patents upon them can be made.

List of Competitions, Contracts, etc.

For some Contracts still open, but not included in this List, see previous issues. Those with an asterisk (*) are advertised in this number: Competitions, —; Contracts, iv. vi. viii. x.; Public Appointments, xviii.; Auction Sales, xxiv. Certain conditions beyond those given in the following information are imposed in some cases, such as: the advertisers do not bind themselves to accept the lowest or any tender; that a fair wages clause shall be observed; that no allowance will be made for tenders; and that deposits are returned on receipt of a bona-fide tender unless stated to the contrary.

The date given at the commencement of each paragraph is the latest date when the tender, or the names of those willing to submit tenders, may be sent in.

***** It must be understood that the following paragraphs are printed as news, and not as advertisements; and that while every endeavour is made to ensure accuracy, we cannot be responsible for errors that *may* occur.**

Competitions.

NOVEMBER 25.—**Newcastle-on-Tyne.**—SCHOOLS.—Limited to local architects. Particulars from the Education Office, Northumberland-road, Newcastle-on-Tyne.

NOVEMBER 29.—**Langside, Glasgow.**—BRANCH LIBRARY.—Assessor, Mr. Alex. N. Paterson, A.R.S.A. Premiums, 50*l*., 30*l*., and 25*l*. Particulars from the Town Clerk, City-chambers, Glasgow.

NOVEMBER 30. — **Balham.**—SWIMMING-BATH.—The Wandsworth B.C. invite designs. See advertisement in issue of August 16. Particulars from Mr. P. Dodd, 215, Balham High-road, S.W.

DECEMBER 1.—**Soña.**—DESIGNS FOR A ROYAL PALACE AND LAW COURTS.—Particulars from the Commercial Intelligence Branch of the Board of Trade, Basinghall-street, E.C. (see p. 173, August 9, and p. 350, September 27).

DECEMBER 2.—**Carlisle.**—SCHOOL BUILDINGS, ETC.—Particulars from the City Surveyor, 36, Fisher-street, Carlisle.

DECEMBER 20.—**R.I.B.A. Competitions.**—All work for the Studentship and Prizes, 1913, must be delivered before 4 p.m. at 9, Conduit-street, W.

JANUARY 1, 1913. — **Dublin.**—MUNICIPAL BUILDINGS.—Assessor, Mr. Albert E. Murray, A.R.H.A. Conditions from the City Treasurer, Dublin. Deposit, 2*l*. 2s.

JANUARY 20, 1913.—**Rome.**—BRITISH SCHOOL AT ROME, SCHOLARSHIP IN ARCHITECTURE.—200*l*. per annum for three years. Particulars from Mr. Evelyn Shaw, 54, Victoria-street, S.W.

FEBRUARY 3, 1913.—**Harrogate.**—SCHOOL.—The Harrogate Education Committee invite designs for a Council school in Skipton-road. See advertisement in issue of November 1 for further particulars.

MARCH 1, 1913. — **Rangoon.** — MUNICIPAL BUILDINGS.—The Committee of the Municipality of Rangoon invite designs for the new Municipal Buildings. Honoraria of 300*l*., 200*l*., and 100*l*. respectively for first, second, and third. See advertisement in August 2 and 30 for further particulars.

MARCH 1, 1913.—**Winnipeg.**—CITY HALL.—Particulars from Mr. A. Waugh, City Hall, Winnipeg. See page 509, November 1.

NO DATE. — **Dursley.** — WORKMEN'S DWELLINGS.—The Parochial Committee of the Dursley R.D.C. invite designs for about thirty workmen's dwellings. See advertisement in issue of October 25 for further particulars.

NO DATE.—**Folkestone.**—PROPOSED KURSAAL.—Cost not to exceed 20,000*l*. Premiums 100, 50, and 25 guineas. See "Competition News," page 542.

NO DATE.—**Jordanhill, Glasgow.**—PROPOSED TRAINING COLLEGE.—Limited to six firms, named in "Competition News," December 1, page 635.

NO DATE. — **Motherwell.**—HIGH SCHOOL.—Dr Burnet, assessor. Premiums 50*l*., 30*l*., and 20*l*.

Contracts.

BUILDING.

The date given at the commencement of each paragraph is the latest date when the tender, or the names of those willing to submit tenders, may be sent in.

NOVEMBER 8.—**Aberdeen.**—RESTORATION.—For the restoration of Oldmill Poorhouse steading, Aberdeen. Plans with Mr. A. H. L. Mackinnon, architect, 245, Union-street.

NOVEMBER 9.—**Ballybrittas.**—DISPENSARY, ETC.—Erection of a dispensary and caretaker's residence. Plans and specification by Mr. Joseph Bannon, Engineer, 8, Bridge-street, Maryborough, seen at the Board-room, Workhouse, Mountmelick.

NOVEMBER 11. — **Banbridge.**—RESIDENCE.—For erection of a dispensary and Medical Officer's residence in Coolnacran, Banbridge. Plans and specifications by Mr. W. W. Larmor, architect, seen at the Poor Law Office, Banbridge.

NOVEMBER 11. — **Morley.** — ADDITIONS, ETC.—Alteration and addition to Victoria Mills, Morley, for Messrs. Benn & Webster. Plans and specifications seen, and quantities from Mr. T. A. Buttery, Lic.R.I.B.A., architect, Queen-street, Morley, and at 1, Basinghall-square, Leeds.

NOVEMBER 12 — **Aspatria.**—ALTERATIONS.—For alterations to property in King-street. Plans and specifications with Mr. J. Henney, architect and surveyor, Aspatria.

NOVEMBER 12. — **Wednesbury.** — URINAL.—For erection of a public urinal in the High Bullen. Plans and specifications seen, and form of tender from Mr. E. Martin Scott, Borough Surveyor, Town Hall, Wednesbury.

NOVEMBER 13. — **Cleckheaton.** — STORE.—Erection of a branch store, Northgate, Cleckheaton, for the Cleckheaton Industrial Co-operative Society, Ltd. Plans, etc., seen, and quantities from Messrs. R. Castle & Son, architects, London City and Midland Bank-chambers, Cleckheaton.

NOVEMBER 13. — **Halifax.**—OFFICES.—Erection of new offices at Highroad Well. Plans seen, and quantities from Messrs. Jackson & Fox, Rawson-street, Halifax.

NOVEMBER 13.—**Walsall.**—EXTENSION.—For the extension of the boiler-house at the Workhouse, Pleck-road, Walsall. Plans and specifications with Mr. A. H. Lewis, Clerk to the Guardians, Union Offices, 29, Leicester-street, Walsall.

* NOVEMBER 14.—**Haileybury.**—SCHOOL.—The Committee of Haileybury College, Herts, invite tenders for New Big School, etc. See advertisement in this issue for further particulars.

NOVEMBER 14 — **Hirwain.**—HOUSES, ETC.—For building thirty houses and making roads at Hirwain for the Bodwigiad Building Club. Plans and specification with Mr. Alec. S. Cameron, architect, 1, Glanant-street, Aberdare.

NOVEMBER 14.—**London.**—EXTENSION.—For the alteration and extension of the boiler-house at the Workhouse, Swaffield-road, Wandsworth. Specification, quantities, and form of tender at the Guardians' Offices, St. John's-hill, Wandsworth. Deposit of 2*l*.

NOVEMBER 14 — **Ponteland.**—HOME.—For the erection of a home for twenty children at Ponteland, Newcastle-upon-Tyne. Plans and specifications from Mr. Charles S. Shortt, Clerk to the Guardians, 26, Mosley-street, Newcastle-upon-Tyne.

NOVEMBER 15.—**Preston.**—SHELTER, ETC.—Erection of a tram shelter at the Lodge, Garstang-road and Moor Park-avenue; also public convenience, Penwortham Bridge approach. Plans seen, and specifications, quantities, and forms of tender from the Borough Surveyor, Town Hall, Preston, on deposit of 10s.

NOVEMBER 16. — **Ludlow.** — HALL, ETC.—For erection of a new drill hall and offices at Ludlow. Quantities, on deposit of 1*l*. 1s., from the architect, Mr. John Butters, Castle-square, Ludlow.

NOVEMBER 16. — **Maerdy.** — HOUSES, ETC.—For the erection of thirty houses and construction of roads and drains for the Coronation Building Club, Maerdy. Plans and specifications seen, and form of tenders from Mr. Edward Rees, architect and surveyor, Alexandra-chambers, Taff-street, Pontypridd.

NOVEMBER 16. — **Plaistow.**—ADDITIONS.—For alterations and additions to the Bush Inn, Plaistow, Sussex. Plans and specifications with Mr. C. H. Burstow, architect, King's-road, Horsham.

* NOVEMBER 16.—**Rochford.**—WORKHOUSE EXTENSIONS.—The Guardians of the Rochford Union invite tenders for the erection of an aged and infirm block at the Workhouse Rochford. See advertisement in this issue for further particulars.

NOVEMBER 18.—**Bristol.**—ROOM.—For the construction of a workmen's mess-room on the West Wharf of the Royal Edward Dock. Specification and contract drawings from Mr. W. W. Squire, Engineer, Engineer's Office, Cumberland-road, Bristol. Deposit of 2*l*.

NOVEMBER 18. — **Chelmsford.** — HOUSE.—For erection of an engine-house at Waterworks, Mildmay-yard. Forms of tender, plans, and specification at the Borough Engineer's Office, 16, London-road.

* NOVEMBER 18. — **Dawley.** — SCHOOL. — The Salop C.C. Elementary Education Department invite tenders for reconstruction of Pool-hill Council School. See advertisement in this issue for further particulars.

NOVEMBER 18. — **Dover.**—IMPROVEMENTS.—For the following works at the Sea Front Baths, Marine-parade, Dover:—Tiling ladies' bath; supplying and erecting two centrifugal pumps with electric motors, and other works in connexion therewith. Forms of tender and specification, on deposit of 2*l*. 2s., from the Borough Engineer, Mr. W. C. Hawke, A.M.Inst.C.E., Maison Dieu House, Biggin-street, Dover.

NOVEMBER 19.—**Cheshunt.**—REPAIRS, ETC.—For alterations, repairs, and other works at Elm Arches, Turner's-hill, Cheshunt. Particulars and form of tender from Mr. J. E. Sharpe, Engineer and Surveyor, Manor House, Cheshunt.

NOVEMBER 19.—**Deptford.**—TANKS.—For erection of two water-supply tanks at the Town Hall. Particulars, conditions of contract, and forms of tender from the Borough Surveyor, Town Hall, New Cross-road, S.E.

NOVEMBER 19.—**Durham.**—IMPROVEMENTS, ETC.—For new Council schools at Oakenshaw and Byers Green; alterations and improvements at Castletown, Browney, and Bearpark Council schools. Plans, specifications, and general conditions of contract seen, and quantities obtained as follows:—For Oakenshaw—At the office of Mr. W. Rushworth, Shire Hall, Durham. For Byers Green—At the office of Mr. H. A. Curry, 3, Bigg-market, Newcastle-on-Tyne. For alterations at Castletown—At the office of Mr. N. Richley, Shire Hall, Durham. For alterations at Browney and Bearpark—At the office of Messrs. Clark & Moscrop, Feethams, Darlington.

NOVEMBER 19.—**Langport, etc.**—STABLES.—The Great Western Railway invite tenders for the erection of stables at Langport, Highbridge, and Martock, Somersetshire. Plans and specification seen, and forms of tender and quantities at the office of the Engineer at Taunton Station.

NOVEMBER 19.—**Weston-super-Mare.**—STABLE.—The Great Western Railway invite tenders for the erection of a stable at Weston-super-Mare. Plans and specification seen, and forms of tender and quantities at the office of the Engineer at Bristol Station.

NOVEMBER 21. — **Caistor.**—COTTAGES.—For the erection of cottages. Plans, specifications, and tender to Mr. A. A. Padley, Clerk, Council Offices, Caistor.

* NOVEMBER 21.—**St. George-in-the-East.**—HOT-WATER SUPPLY.—The Guardians of the Poor of the Parish of St. George's-in-the-East invite tenders for alterations to the hot-water supply system. See advertisement in this issue for further particulars.

* NOVEMBER 21.—**Upper Clapton.**—BRANCH LIBRARY.—The Hackney B.C. invite tenders for the erection of a Branch Library. See advertisement in this issue for further particulars.

NOVEMBER 22.—**Ballyclough.**—IMPROVEMENTS.—For improvements to the Ballyclough N. schools. Plans and specifications at the schools.

NOVEMBER 25. — **Bristol.**—EXCHANGE, ETC.—Erection of the Bristol Labour Exchange and Probate Registry. Drawings, specification, and conditions and form of contract with Mr. F. A. Huntley, H.M. Office of Works, Bristol. Quantities and forms of tender, on deposit of 1*l*. 1s., from the Secretary, H.M. Office of Works, etc., Storey's-gate, London, S.W.

* NOVEMBER 25.—**Chorley Wood.**—SCHOOL.—The Herts C.C. Education Committee invite tenders for new County Council school. See advertisement in this issue for further particulars.

NOVEMBER 25. — **Grantown.**—ADDITIONS.—For additions to the Palace Hotel, Grantown-on-Spey. Plans, specifications, etc, with Mr. R. B. Pratt, A.R.I.B.A., architect, 110, High-street, Elgin.

* NOVEMBER 25. — **London.**—MASONS' YARD.—The Commissioners of H.M. Works and Public Buildings invite tenders for new masons' yard, Dean Bradley-street, Millbank, S.W. See advertisement in this issue for further particulars.

* NOVEMBER 26.—**Bristol.**—LABOUR EXCHANGE, ETC.—The Commissioners of H.M. Works and Public Buildings invite tenders for Labour Exchange and Private Registry. See advertisement in this issue for further particulars.

DECEMBER 1.—**Longford.**—LIBRARY.—Erection of a library and gymnasium at St. Mel's College, Longford. Plans and specifications with Mr. T. F. McNamara, architect, 192, Great Brunswick-street, Dublin.

DECEMBER 2.—**Cullen.**—HARBOUR WORKS.—Construction of harbour extension works, comprising the removal of the existing stone jetty and construction of a new concrete jetty; the deepening of the existing harbour and excavation in soft material and rock for its extension landwards; the construction of a concrete path and road retaining wall, slip, and expending beach; sheet piling, and other works. Drawings and specification with the Engineer to the Burgh for these works, Mr. W. T. Douglass, M.Inst.C.E., 15, Victoria-street, Westminster, S.W. Deposit of 1*l*.

DECEMBER 18.—**Birmingham.**—HOMES.—Erection of homes for epileptic and feeble-minded children and adults, a school, an administration block, assembly-room, and other buildings and works in connexion therewith, at Monyhull Colony, King's Heath, Birmingham. Plans and specifications by Messrs. C. Whitwell & Son, architects, Newhall-street, Birmingham. Quantities by Mr. J. L. Williams, quantity surveyor, Temple-row, Birmingham. Deposit of 25*l*.

NO DATE. — **Baildon.**—HOUSE.—Erection of a detached house at Tong Park, Baildon. Messrs. S. Jackson & Son, architects, 11, Tanfield-chambers, Bradford.

NO DATE. — **Balla.** — CHURCH.—Erection and completion of the new Church of St. Patrick, Balla. Drawings and specification seen, and quantities from Messrs. Doolin & Butler, architects, Mansion House-chambers, Dublin.

NO DATE. — **Farnhill Hall.** — COTTAGE, ETC.—Erection of a farm-house, stables, and cottage at Farnhill Hall. Plans seen, and quantities from Mr. James Hartley, architect, Skipton.

BUILDING—*continued.*

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NO DATE. — **Lealholm.** — ALTERATIONS, ETC.—For alterations to cottages at Lealholm and Ruswarp. Drawings seen, and specifications from Mr. Arthur E. Young, architect and surveyor, 77, Baxtergate, Whitby.

NO DATE. — **Merthyr Tydfil.** — WORKS.—For various works at Penydarren Park, Merthyr Tydfil, for the Merthyr Town Association Football Club Company, Ltd. Particulars from Mr. O. P. Bevan, P.A.S.I., architect and surveyor, Express-chambers, Merthyr Tydfil.

NO DATE. — **Padiham.** — SHOPS, ETC.—For rebuilding of shop property in Burnley-road, Padiham. Architect, Mr. Fred. J. Parkinson, 9, Richmond-terrace, Blackburn. Deposit of 1*l.* 1s.

NO DATE.—**Pontypridd.**—IMPROVEMENTS.—For reseating and other improvements in Eglwysbach Chapel, Pontypridd. Plans and specification at 76, Merthyr-road, Pontypridd.

NO DATE.—**Swansea.**—HOUSES.—For the erection of four houses, Le Brees-avenue, Skettyroad, Swansea. Messrs. Wm. Cousins & Son, surveyors, 17, Victoria-terrace, King Edward-road, Swansea.

NO DATE.—**Ynyslas.**—HOUSE.—For erection of a house. Plans, specification, and particulars from Messrs. Deakin & Howard Jones, M.S.A., Plas Ynys, Borth, R.S.O.

ENGINEERING, IRON, AND STEEL.

NOVEMBER 9.—**Forehoe.**—BRIDGE.—For the rebuilding of the Cavick Bridge, Wymondham. Plans and specifications with Mr. Wm. Partridge Smith, Clerk to the Council, Vicar-street, Wymondham.

NOVEMBER 11. — **Keighley.**—ALTERNATOR.—For one 2,000-kw. steam turbo-alternator, complete with surface-condensing plant. Specification and form of tender from Mr. H. Webber, A.M.Inst.E.E., Borough Electrical Engineer, Electricity Offices, Coney-lane, Keighley, on 1*l.* 1s. deposit.

NOVEMBER 13. — **Birmingham.**—BRIDGE.—For the construction of a bridge over the River Cole in Forman's-road, Sparkhill. Drawings and specifications seen, and quantities and form of tender from Mr. H. E. Stilgoe, M.Inst.C.E., City Engineer and Surveyor, Council House, Birmingham, on deposit of 2*l.*

NOVEMBER 13.—**Lymm.**—PLANT, ETC.—Erection of one 100-gallon ejector and two air compressors, alterations to existing ejectors, repairs and renewals to two existing gas-engines and adjunct works. Specification and particulars from the Engineer, Mr. W. M. Beckett, A.M.Inst.C.E., 33, Brazennose-street, Manchester.

NOVEMBER 13.—**Seaton Sluice.**—RAILWAY.—The North-Eastern Railway invites tenders for the construction of railways at Monkseaton, the widening of a portion of the Avenue branch, and a new railway to Seaton Sluice. Plans, specification, and schedules of quantities at the office of the Company's Chief Engineer, Mr. Charles A. Harrison, Forth Banks, Newcastle-on-Tyne.

NOVEMBER 14. — **Hull.** — EMBANKMENT.—Construction of an earthwork embankment, 43.40 chains in length, and for the raising of an existing earthwork embankment, 22 chains in length, on the north side of Read's Island, in the River Humber, near South Ferriby. Specifications and forms of tender from Mr. Alfred W. Franklin, Secretary, Conservancy-buildings, Hull.

* DECEMBER 2.—**Aberdeen.**—STEAM HEATING.—The Aberdeen Joint Station Committee invite designs and tenders for a complete system of steam heating for the new station buildings. See advertisement in this issue for further particulars.

DECEMBER 6.—**East Cowes.**—BORE HOLE.—For sinking an artesian bore hole at Burnt House, Isle of Wight. Plans and specifications seen, and particulars from the Council's Surveyor, Mr. Albert Edward Barton, Town Hall, East Cowes. Deposit of 2*l.* 2s.

DECEMBER 7.—**Merthyr Tydfil.**—RESERVOIR.—Construction of a reservoir (the Taf Fechan Reservoir) near the Pontsticill Junction of the Brecon and Merthyr Railway, with its outlets, road diversions, and other ancillary works; also supplying and laying of about fifteen miles of cast-iron pipes. Drawings seen, and specifications and quantities from Sir Alex. Binnie, Son, & Deacon, 8*l.* Stephen's House, Victoria-embankment, London, S.W. Deposit of 5*l.*

FURNITURE, PAINTING, MATERIALS, etc.

NOVEMBER 13. — **Burnley.** — PAINTING.—For painting, etc., at the Workhouse. Forms of tender from Mr. J. S. Horn, Clerk, Union Offices, Burnley.

NOVEMBER 16. — **Halifax.** — PAINTING.—For painting sundry schools. Specifications seen, and forms of tender from Mr. J. Lord, M.Inst.C.E., Borough Engineer, Town Hall, Halifax. Deposit of 5*l.*

* NOVEMBER 19.—**East Ham.**—SCHOOL FURNITURE.—The East Ham Education Committee invite tenders for supply of school furniture for Vicarage-lane Council School. See advertisement in this issue for further particulars.

NOVEMBER 20.—**Hull.**—FITTINGS, ETC.—For the electric lighting, fittings, and electric bells for the Teachers' Training College, Cottingham-road, Hull. Particulars from the City Treasurer, Guildhall, Hull. Deposit of 1*l.* 1s.

NO DATE. — **Pontypridd.** — PAINTING.—For decorating and painting Eglwysbach Chapel, Pontypridd. Particulars from 76, Merthyr-road, Pontypridd.

ROADS, SANITARY AND WATER WORKS.

NOVEMBER 9. — **Hoole.**—GREEN.—For laying a new bowling green in the Alexandra Park, Hoole. Plans and quantities from Mr Fred Davies, Consulting Surveyor, 14, Newgate-street, Chester.

NOVEMBER 9. — **Keighley.** — VALVES, ETC.—For the delivery of sluice valves, air valves, fire hydrants, etc., required in connexion with the new main from Denby-hill to Moss Carr. Specification, form of tender, and schedule from the Engineer, Mr. M. Ratcliffe Barnett, M.Inst.C.E., Town Hall, Keighley.

NOVEMBER 11. — **Bedlington.**—ROAD.—For the making-up of Back Gordon-terrace, Bedlington, and portion of Cross-street. Plans, specification, and quantities at the office of the Surveyor of the Council, Mr. J. E. Johnston, Bedlington.

NOVEMBER 11. — **Cockermouth.**—SEWER, ETC.—For laying a sewer at Eaglesfield and construction of 30 lin. yds. of square stone culvert. Particulars from Mr. J. B. Wilson, A.M.Inst.C.E., Grecian Villa, Cockermouth.

NOVEMBER 11. — **East Cowes.** — GRAVEL.—For supplying 500 cubic yds. of gravel and 300 cubic yds. of granite. Specifications seen, and particulars from the Council's Surveyor, Mr. Albert E. Barton, Town Hall, East Cowes.

NOVEMBER 11.—**London.**—PAVING.—For the making-up and paving of that part of Southcroft-road, Streatham, which lies between Mitcham-lane and Nos. 15 and 16 (inclusive), Southcroft-road, Wandsworth. Specification and drawings seen, and forms of tender from the Borough Engineer, Mr. P. Dodd, M.Inst.C.E., at the office of the New Streets Department, No. 56, East-hill, Wandsworth, S.W. Deposit of 5*l.* 5s.

NOVEMBER 12. — **Edmonton.** — STREETS.—For making-up the following private streets:—Seymour-road, Monmouth-road (part), Cornwallis-grove (part), Beamish-road, Kenwood-road, Junction-road, Sunnyside-road North, Sunnyside-road East, Sunnyside-road South, Park-avenue, Bush Hill Park. Plans, particulars, and forms of tender from the Council's Engineer and Surveyor, Mr. Cuthbert Brown, A.M.Inst.C.E., at the Town Hall, Lower Edmonton. Deposit of 2*l.* 2s.

NOVEMBER 12.—**Saltash.**—KERBING.—For kerbing, channelling, and Dean stone paving in North-road, Tamar-street, and Albert-road, Saltash. Plans and specifications at the Borough Surveyor's Office.

NOVEMBER 13. — **Birmingham.** — ROAD.—For the reconstruction of a portion of Forman's-road, Sparkhill, including excavating, forming macadam carriageway, granite kerbs and channels, flagging footpaths, surface-water connexions, sewers, and manholes. Drawings and specification seen, and quantities and form of tender, on deposit of 2*l.*, from Mr. Henry E. Stilgoe, M.Inst.C.E., City Engineer and Surveyor, the Council House, Birmingham.

NOVEMBER 13. — **Chatham.** — MATERIALS.—For the supply of materials. Specifications and forms of tender at the Borough Surveyor's Office, Town Hall, Chatham.

NOVEMBER 13.—**Easington.**—STREETS.—For the paving of East-terrace (back), Hulam-street (back and front), Hilda-street (back and front), Front Armstrong-street, Boyd-street (back and front), Back Church-street, with three cross streets; Wilkinson-street (back and front), Back Burdon-street, South-terrace (back and front), with two cross streets; and Back Front-street. General conditions and specification from Mr. Gilbert Waterhouse, Surveyor, Easington, Castle Eden. Deposit of 2*l.* 2s.

NOVEMBER 13.—**Haslemere.**—ROADS.—For the paving and making-up of West-street and Bridge-street. Plans and specifications seen, and quantities from the District Surveyor, Mr. S. B. Hazell, High-street, Bramley, Surrey. Deposit of 1*l.* 1s.

NOVEMBER 15. — **Brighton.**—FLINTS.—For the supply of 4,000 cubic yds. of hand-picked land flints. Specification and form of tender from the Borough Surveyor, Town Hall, Brighton.

NOVEMBER 15. — **Beacroft.** — WATER SUPPLY.—For excavating, laying pipes, refilling trenches in respect of a line of 6-in. internal diameter cast-iron pipes, about 4,834 yds in length, along the York and Barwick-roads from Halton Dial to Stanks Bridge; also a line of 4-in. internal diameter cast-iron pipes, about 1,264 yds. in length. The drawings at the office of the Waterworks Engineer, Great George-street, Leeds.

NOVEMBER 16.—**Nelson.**—STREETS.—For private street works. Plans and specifications seen, and forms of tender from Mr. W. Shackleton, A.M.Inst.C.E., Borough Engineer and Surveyor.

NOVEMBER 18. — **Durham.** — COURT.—For the formation of a tennis court, railing off the football field, and alterations to Hartlepool Henry Smith School. Plan, specification, and general conditions of contract at the school. Mr. J. A. L. Robson, County Secretary for Higher Education, Shire Hall, Durham.

NOVEMBER 20. — **Tring.** — SEWAGE, ETC.—For street works in Longfield-road and Beaconsfield-road, and sewers in Miswell-lane and Aylesbury-road. Plans, conditions, and specifications seen, and quantities and forms of tender, on deposit of 1*l.* 1s., from Mr. S. S. Gettings, A.M.Inst.C.E., Surveyor, Surveyor's Office, Tring.

NOVEMBER 22. — **Lewes.** — MATERIALS.—For supply of materials. Particulars, conditions of contract, and forms of tender from Mr. F. J. Wood, A.M.Inst.C.E., County Surveyor, County Hall, Lewes.

NOVEMBER 25. — **Coventry.**—PIPES.—For the supply of earthenware or stoneware pipes. General conditions and specification, with tender and quantities, on deposit of 2*l.* 2s., from Mr. J. E. Swindlehurst, M.Inst.C.E., City Engineer and Surveyor, St. Mary's Hall, Coventry.

NOVEMBER 25. — **Newmarket.** — TANK, ETC.—Supply of 3-in. cast-iron pipes and specials, and the erection of cast-iron tank. Plans and specifications seen, and quantities and form of tender from the engineers, Messrs. Sands & Walker, Milton-chambers, Milton-street, Nottingham. Deposit of 3*l.* 3s.

NOVEMBER 26.—**Friern Barnet.**—ROADS.—For kerbing, channelling, making-up, etc., Hollyfield-avenue and part of Chandos-avenue. Forms of tender and particulars from Mr. E. J. Reynolds, A.M.Inst.C.E., the Council's Engineer and Surveyor, Council Offices, The Priory, Friern Barnet, N.

NOVEMBER 26. — **Gloucester.** — SEWAGE.—For a main outfall sewer passing under Great Western Railway Dock Branch embankment; sinking and lining two cast-iron shafts, driving and lining a cast-iron tunnel. Drawings seen, and specification, form of tender, and quantities from Messrs. Wm. Fox, F. W. La Trobe-Bateman & J. R. Fox, 5, Victoria-street, Westminster, or the Surveyor, Mr. R. Read, Guildhall, Gloucester, on deposit of 5*l.*

Public Appointment.

Nature of Appointment.	By whom Advertised.	Salary.	Application to be in
*CHIEF CLERK OF WORKS	Com'rs. of Irish Lights	150*l.* per annum	Nov. 27

Auction Sales.

Nature and Place of Sale.	By whom Offered.	Date of Sale.
*PLANT, STOCK, MACHINERY, ETC.—On the Premises	C. D. Levy	Nov. 12
*DEALS, BATTENS, BOARDS, TIMBER, ETC.—Great Hall, Winchester House, E.C.	Churchill & Sim	Nov. 13
*FREEHOLD BUILDING LAND, SUTTON & CARSHALTON—Greyhound Hotel, Croydon	Robt. W. Fuller, Moon, & Fuller	Nov. 14
*ENGINEER'S PLANT, KING'S CROSS, N.—On the Premises	Horne & Co.	Nov. 15
*FREEHOLD BUILDING PLOTS & SHOPS—At the Mart	Mark Lidell & Son	Nov. 15
*BUILDING SITES, SURREY—At Station Hotel, Kingwood	Densham & Lambert	Nov. 16
*FREEHOLD LAND, CHISWICK—At the Mart	Tyser, Greenwood, & Co.	Nov. 19
*FREEHOLD BUILDING SITE, NOTTING-HILL GATE—At the Mart	Horne & Co.	Dec. 10
*FREEHOLD ESTATE, LEWISHAM—At the Mart	Daniel Smith, Son, & Oakley	No date.
*WOOD-WORKING MACHINERY & BLDR'S. STK. & PLANT, BATTERSEA—On the Pres.	J. T. Skelding & Holland	No date.

SOME RECENT SALES OF PROPERTY:

ESTATE EXCHANGE REPORT.

October 14.—By WM. PEARSE & SON.

Modbury, Devon.—Lapthorne Farm, 58½ acres, f. £2,000

October 15.—By MILLER, SON, & CO.

Donhead St. Mary, Wilts.—Part of the Charlton Estate, 434 acres, f. 11,532

October 16.—By E. G. HOTHERSALL & SONS.

Garstang, Lancs.—Manor Farm, 98 a. 3 r. 23 p., f. 4,250

By HEPPER & SONS.

Leeds, Yorks.—Huslingthorpe Tannery, 25,154 yds., f. 10,000

October 17.—By HUMBERT & FLINT.

Sulgrave, Northants.—Manor Farm, etc., 188 a. 3 r. 37 p., f. 3,742

October 22.—By R. DONKIN & SON.

Rothbury, Northumberland. — West Field House Farm, 131 a., f. 4,800

October 23.—By EDWARD BAILEY & SON.

Brant, Broughton, Lincs.—Agricultural estate, 2,255 a., f. 66,807

By ESCRITT & BARRELL.

Fosdyke, Lincs.—Farm 110 a., f. 3,600

By MADDISON, MILES, & MADDISON.

Caister-on-Sea, Norfolk.—Hill Farm, 56 a., f.... 2,795

By THORNBORROW & CO.

Orton, Westmorland.—Meadow land, 11 a., f... 660

By SALTER, REX, & CO.

Kentish Town. — 10, Grange-rd., f.g.r. 3l. 10s., reversion in 18¼ yrs. 205

29, 30, and 31, Chalk Farm-rd., f.g. rents 2l. 2s., reversion in 18¼ yrs. 750

22 to 28 (even), Kentish Town-rd., f.g. rents 6l., reversion in 18¼ yrs. 915

By KNIGHT, FRANK, & RUTLEY.

Peasmarsh, Sussex.—Peasmarsh Place estate, 2,536 a., f. 60,000

October 24.—By BRAUND & ORAM.

Ardeley, Herts.—Highbury Farm, 110 a. 3 r. 8 p., f. and c. 2,000

By C. C. & T. MOORE.

Forest Gate.—94 and 96, Glenparke-rd., u.t. 79 yrs., g.r. 9l., w.r. 67l. 12s. 330

By NEWSON & SHEPHERD.

Islington.—37, Duncan-ter., u.t. 21 yrs., g.r. 9l., y.r. 50l. 150

Essex-rd., plot of land, f. 250

Highbury.—Blackstock-rd., plot of land, f. 600

Holloway.—2, Cottenham-rd., u.t. 50 yrs., g.r. nil, y.r. 60l. 550

20, St. George's-av., u.t. 54 yrs., g.r. 7l. 7s., e.r. 50l. 350

New Southgate.—Maidstone-rd., Essendon House, f., e.r. 55l. 665

Barnsbury.—32 to 36, Matilda-st., u.t. 32 yrs., g.r. 30l. 10s., y.r. 162l. 765

Islington.—3 and 4, Luard-st., u.t. 28 yrs., g.r. 12l., y. and w.r 74l. 4s. 275

By T. D. & A. R. PEACEY.

Harrow.—Mount Park-rd., Duncraves, and 2½ acres, f. 4,100

By STIMSON & SONS.

Bermondsey.—4, Tanner-st., f.g.r. 13l. 10s., reversion in 12 yrs. 520

Clapham Common.—1, Cedars-rd., u.t. 47 yrs., g.r. 25l., p. 355

Balham.—124, Fearless-rd., u.t. 61 yrs., g.r. 7l. 10s., e.r. 45l. 225

Pimlico.—35 and 37, Warwick-st. (s.), u.t. 12 yrs., g.r. 10l., y.r. 140l. 660

56 to 64 (even), Wilcox-rd., u.t. 42¾ yrs., g.r. 15l., y. and w.r. 160l. 16s. 870

25 to 31 (odd), Hartington-rd., u.t. 42¾ yrs., g.r. 12l., w.r. 124l. 16s. 810

31 and 32, Rutland-st., u.t. 42¾ yrs., g.r. 6l., w.r. 62l. 8s. 435

34 to 39, Mawbey-st., u.t. 47 yrs., g.r. 24l., w.r. 184l. 12s. 1,120

Battersea.—1, 2, 3, 23 to 28, Porson-st., u.t. 32 yrs., g.r. 20l., w.r. 245l. 14s. 1,140

By JONES, SON, & VERNON.

Chaddesley Corbett, Worcs.—Tanwood and 168 a. 2 r. 11 p., f. 4,350

By MERRIWEATHER & SON.

Beighton, Derby.—Farms and small holdings, 342 a., f. 9,485

October 25.—By HERRING, SON, & DAW.

Maidenhead.—Harrow-la., plot of land, f. 120

Shoreditch.—56 to 62; 68 to 24, (even), 80 and 82, Laburnum-st., f., y.r. 228l. 5s. 1,850

Thornton Heath.—1, 1a, 2 to 15, Nursery-rd., f., gross rentals 267l. 16s. 1,525

21, Nursery-rd. (s.), f., gross rental 31l. 4s. 165

45 to 51 (odd), Zion-rd., f., gross rental 66l. 6s. 380

1 to 4, Garnet-rd., f., gross rental 62l. 14s. 360

By GEORGE BILLINGS & CO.

Clapton.—32 and 77, London-rd., u.t. 47 yrs., g.r. 10l. 5s., y.r. 62l. 375

By WARREN & STUPART.

Hornsey.—16 to 26 (even), Clarendon-rd., f., gross rental 142l. 16s. 900

Contractions used in these lists.—F.g.r. for freehold ground-rent; l.g.r. for leasehold ground-rent; i.g.r. for improved ground-rent; g.r. for ground-rent; r. for rent; f. for freehold; c. for copyhold; l. for leasehold; p. for possession; e.r. for estimated rental; w.r. for weekly rental; q.r. for quarterly rental; y.r. for yearly rental; u.t. for unexpired term; p.a. for per annum; yrs. for years; la. for lane; st. for street; rd. for road; sq. for square; pl. for place; ter. for terrace; cres. for crescent; av. for avenue; gdns. for gardens; yd. for yard; gr. for grove; b.h. for beerhouse; p.h. for public-house; o. for offices; a. for shops; ct. for court.

TERMS OF SUBSCRIPTION.

"THE BUILDER" (Published Weekly) is supplied DIRECT from the Office to residents in any part of the United Kingdom at the prepaid rate of 19s. per annum, with delivery by Friday Morning's Post in London and its suburbs.

To Canada, post-free, 21s. 6d. per annum; and to all parts of Europe, America, Australia, New Zealand, India, China, Ceylon, etc., 26s. per annum.

Remittances (payable to J. MORGAN) should be addressed to The Publisher of "THE BUILDER," 4, Catherine-street, W.C.

PRICES CURRENT OF MATERIALS.

*** Our aim in this list is to give, as far as possible, the *average* prices of materials, not necessarily the lowest. Quality and quantity obviously affect prices—a fact which should be remembered by those who make use of this information.

BRICKS, &c.

Per 1000 Alongside, in River.

	£ s. d.
Best Stocks	1 14 0
Picked Stocks for Facings	2 10 0

Per 1000, Delivered at Railway Depôt.

	£ s. d.		£ s. d.
Flettons	1 13 0	Best Blue Pressed Staffordshire	3 15 0
Best Fareham Red	3 12 0	Do. Bullnose	4 0 0
Best Red Pressed Ruabon Facing	5 0 0	Best Stourbridge Fire Bricks	4 0 0
GLAZED BRICKS—			
Best White, Ivory, and Salt Glzd. Str'tch'rs	12 7 6	Double Headers	14 17 6
Headers	11 17 6	One Side and two Ends	18 17 6
Quoins, Bullnose, and 4½ in. Flats	15 17 6	Two Sides and one End	19 17 6
D'ble Stretchers	17 17 6	Splays & Squints	17 7 6

Second Quality £1 10s. per 1000 less than best.

	s. d.	
Thames and Pit Sand	6 9	per yard, delivered.
Thames Ballast	5 6	" "
Best Portland Cement	36 0	per ton, "
Best Ground Blue Lias Lime	19 0	" "

NOTE—The cement or lime is exclusive of the ordinary charge for sacks.

Grey Stone Lime ..... 13s. 6d. per yard delivered.
Stourbridge Fireclay in sacks 27s. 0d. per ton at rly dpt.

STONE.

Per Ft. Cube.

	s. d.
BATH STONE—delivered on road waggons, Paddington Depôt	1 7½
Do. do. delivered on road waggons, Nine Elms Depôt	1 9
PORTLAND STONE (20 ft. average)—	
Brown Whitbed, delivered on road waggons, Paddington Depôt, Nine Elms Depôt, or Pimlico Wharf	2 3
White Basebed, delivered on road waggons Paddington Depôt, Nine Elms Depôt, or Pimlico Wharf	2 4½

Per Ft. Cube, delivered at Railway Depôt.

	s. d.		s. d.
Ancaster in blocks	1 10	Closeburn Red Freestone	2 0
Beer in blocks	1 6	Red Mansfield Freestone	2 4
Greenshill in blocks	1 10	Talacre & Gwespyr Stone	2 4
Darley Dale in blocks	2 4		
Red Corsehill in blocks	2 3		

YORK STONE—*Robin Hood Quality.*

Per Ft. Cube, Delivered at Railway Depôt.	s. d.
Scappled random blocks	2 10
Per Ft. Super., Delivered at Railway Depôt.	
6 in. sawn two sides landings to sizes (under 40 ft. super.)	2 3
6 in. rubbed two sides ditto, ditto	2 6
3 in. sawn two sides slabs (random sizes)	0 11½
2 in. to 2½ in. sawn one side slabs (random sizes)	0 7
1½ in. to 2 in. ditto, ditto	0 6
HARD YORK—	
Per Ft. Cube, Delivered at Railway Depôt.	
Scappled random blocks	3 0
Per Ft. Super., Delivered at Railway Depôt.	
6 in. sawn two sides landing to sizes (under 40 ft. super.)	2 8
6 in. rubbed two sides ditto	3 0
3 in. sawn two sides slabs (random sizes)	1 2
2 in. self-faced random flags	0 5

SLATES.

Per 1000 of 1200 at Railway Depôt.

In. In.	£ s. d.	In. In.	£ s. d.
20×10 best blue Bangor	13 2 6	20×10 best Eur'ka unfading green	15 17 6
20×12 ditto	13 17 6	20×12 ditto	18 7 6
20×10 1st quality ditto	13 0 0	18×10 ditto	13 5 0
20×12 ditto	13 15 0	16×8 ditto	10 5 0
16×8 ditto	7 5 0	20×10 permanent green	11 12 6
22×10 best blue Portmadoc	12 12 6	18×10 ditto	9 12 6
16×8 ditto	6 12 6	16×8 ditto	6 12 6

TILES.

At Railway Depôt.

	s. d.		s. d.
Best plain red roofing (per 1000)	42 0	Best "Hartshill" brand, plain sand-faced (per 1000)	45 0
Hip and Valley (per doz.)	3 7	Do. pressed (per 1000)	42 6
Best Broseley (per 1000)	50 0	Do. Ornamental (per 1000)	47 6
Do. Ornamental (per 1000)	52 6	Hip (per doz.)	4 0
Hip and Valley (per doz.)	4 0	Valley (per doz.)	3 6
Best Ruabon red, brown, or brindled (Edw'ds) (per 1000)	57 6	Staffords. (Hanley) Reds or Brindled (per 1000)	42 6
Do. Ornamental (per 1000)	60 0	Hand-made sand-faced (per 1000)	45 0
Hip (per doz.)	4 0	Hip (per doz.)	4 0
Valley (per doz.)	3 0	Valley (per doz.)	3 6

WOOD.

BUILDING WOOD.	At per standard. £ s. d.	£ s. d.
Deals: best 3 in. by 11 in. and 4 in. by 9 in. and 11 in.	14 0 0 ...	15 10 0
Deals: best 3 by 9	13 10 0 ...	14 10 0

WOOD (*Continued*).

BUILDING WOOD (*Continued*)—	At per standard. £ s. d.	£ s. d.
Battens: best 2½ in. by 7 in. and 8in., and 3 in. by 7 in. and 8 in.	11 10 0 ...	12 10 0
Battens: best 2½ by 6 and 3 by 6	0 10 0	less than 7 in. and 8 in.
Deals: seconds	1 0 0	less than best.
Battens: seconds	0 10 0 "	"
2 in. by in. and 2 in. by 6 in.	9 0 0 ...	10 10 0
2 in. by 4½ in. and 2 in. by 5 in.	9 0 0 ...	10 0 0
Foreign Sawn Boards—		
1 in. and 1¼ in. by 7 in.	0 10 0	more than battens.
¼ in.	1 0 0	"
Fir timber: best middling Danzig or Memel (average specification)	At per load of 50 ft. 5 0 0 ...	5 10 0
Seconds	4 10 0 ...	5 0 0
Small timber (8 in. to 10 in.)	3 17 6 ...	4 0 0
Small timber (6 in. to 8 in.)	3 5 0 ...	3 10 0
Swedish balks	2 12 6 ...	3 0 0
Pitch-pine timber (30 ft. average)	5 5 0 ...	6 0 0

JOINERS' WOOD.	At per standard. £ s. d.	£ s. d.
White Sea: first yellow deals, 3 in. by 11 in.	24 10 0 ...	25 10 0
3 in. by 9 in.	22 10 0 ...	23 10 0
Battens, 2½ in. and 3 in. by 7 in.	17 0 0 ...	18 0 0
Second yellow deals, 3in. by 11in.	19 0 0 ...	20 0 "
" " 3 in. by 9 in.	18 0 0 ...	19 10 0
Battens, 2½ in. and 3in. by 7 in.	14 0 0 ...	15 0 0
Third yellow deals, 3 in. by 11 in. and 9 in.	14 0 0 ...	15 0 0
Battens, 2½ in. and 3 in. by 7 in.	11 10 0 ...	12 10 0
Petersburg: first yellow deals, 3 in. by 11 in.	21 10 0 ...	22 10 0
Do. 3 in. by 9 in.	18 10 0 ...	19 10 0
Battens	14 0 0 ...	15 0 0
Second yellow deals, 3 in. by 11 in	16 10 0 ...	17 10 0
Do. 3 in. by 9 in.	15 0 0 ...	16 0 0
Battens	11 10 0 ...	12 10 0
Third yellow deals, 3in. by 11 in.	13 10 0 ...	14 10 0
Do. 3 in. by 9 in.	13 0 0 ...	14 0 0
Battens	10 10 0 ...	11 0 0
White Sea and Petersburg—		
First white deals, 3 in. by 11 in.	15 0 0 ...	16 0 0
" " 3 in. by 9 in.	14 0 0 ...	14 10 0
Battens	11 10 0 ...	12 10 0
Second white deals, 3in. by 11in.	14 0 0 ...	15 0 0
" " 3 in. by 9 in.	13 0 0 ...	14 0 0
Battens	10 10 0 ...	11 0 0
Pitch-pine: deals	19 0 0 ...	21 0 0
Under 2 in. thick extra	0 10 0 ...	1 0 0
Yellow Pine—First, regular sizes	48 0 0	upwards.
Oddments	32 0 0	"
Seconds, regular sizes	33 0 0	"
Oddments	28 0 0	"
Kauri Pine—Planks per ft. cube.	0 4 6 ...	0 6 0
Danzig and Stettin Oak Logs—		
Large, per ft. cube	0 3 0 ...	0 3 9
Small " "	0 2 6 ...	0 2 6
Wainscot Oak Logs, per ft. cube	0 6 6 ...	0 8 0
Dry Wainscot Oak, per ft. sup. as inch	0 0 10 ...	0 1 0
¼ in. do. do.	0 0 8½ ...	—
Dry Mahogany—Honduras, Tabasco, per ft. super. as inch..	0 0 10 ...	0 1 1
Selected, Figury, per ft. super. as inch	0 1 6 ...	0 2 6
Dry Walnut, American, per ft. super. as inch	0 0 10 ...	0 1 0
Teak, per load	18 0 0 ...	22 0 0
American Whitewood planks, per ft. cube	0 5 0 ...	0 6 0

Prepared Flooring, etc.—	Per square. £ s. d.	£ s. d.
1 in. by 7 in. yellow, planed and shot	0 13 6 ...	0 17 0
1 in. by 7 in. yellow, planed and matched	0 14 0 ...	0 18 0
1¼ in. by 7 in. yellow, planed and matched	0 16 0 ...	1 0 0
1 in. by 7 in. white, planed and shot	0 12 0 ...	0 14 6
1 in. by 7 in. white, planed and matched	0 12 6 ...	0 15 0
1¼ in. by 7 in. white, planed and matched	0 15 0 ...	0 16 6
¾ in. by 7 in. yellow, matched and beaded or V-jointed brds.	0 11 0 ...	0 13 6
1 in. by 7 in. " "	0 14 0 ...	0 18 6
¾ in. by 7 in. white " "	0 10 0 ...	0 11 0
1 in. by 7 in. " "	0 12 9 ...	0 15 0

6 in. at 6d. to 9d. per square less than 7 in.

JOISTS, GIRDERS, &c.

	In London, or delivered Railway Vans, per ton. £ s. d.	£ s. d.
Rolled Steel Joists, ordinary sections	8 10 0 ...	9 10 0
Compound Girders, ordinary sections	10 0 0 ...	11 0 0
Steel Compound Stanchions	11 10 0 ...	12 10 0
Angles, Tees, and Channels, ordinary sections	10 0 0 ...	11 0 0
Flitch Plates	10 0 0 ...	11 0 0
Cast Iron Columns & Stanchions, including ordinary patterns	8 0 0 ...	8 10 0

METALS.

IRON—	Per ton, in London. £ s. d.	£ s. d.
Common Bars	9 0 0 ...	9 10 0
Staffordshire Crown Bars, good merchant quality	5 0 ...	9 15 0
Staffordshire "Marked Bars"	11 0 0 ...	—
Mild Steel Bars	9 5 0 ...	9 15 0
Hoop Iron, basis price	10 0 0 ...	—
" " Galvanised	17 10 0 ...	—
(*And upwards, according to size and gauge.)		
Sheet Iron Black—		
Ordinary sizes to 20 g.	10 5 0 ...	—
" " 24 g.	11 5 0 ...	—
" " 26 g.	12 15 0 ...	—
Sheet Iron, Galvanised, flat, ordinary quality—		
Ordinary sizes, 6 ft. by 2 ft. to 3 ft. to 20 g.	15 10 0 ...	—
Ordinary sizes to 22 g. and 24 g.	16 0 0 ...	—
" " 26 g.	17 0 0 ...	—
Sheet Iron, Galvanised, flat, best quality—		
Ordinary sizes to 20 g.	18 10 0 ...	—
" " 22 g. and 24 g.	19 0 0 ...	—
" " 26 g.	20 10 0 ...	—

METALS (*Continued*).

IRON (*Continued*)—	Per ton, in London. £ s. d.		£ s. d.
Galvanised Corrugated Sheets—			
Ordinary sizes, 6ft. to 8ft. 20 g.	15 0 0	...	—
" " 22 g. and 24 g.	15 5 0	...	—
" " 26 g.	16 15 0	...	—
Best Soft Steel Sheets, 6 ft. by 2 ft. to 3 ft. to 20 g. and thicker	12 10 0	...	—
Best Soft Steel Sheets, 2 g. & 24 g.	13 10 0	...	—
" " " 26 g.	15 10 0	...	—
Cut Nails, 3 in. to 6 in.	11 0 0	...	11 10 0
(Under 3 in., usual trade extras.)			

LEAD, &c.

Delivered in London.

	£ s. d.		
LEAD—Sheet, English, 4lb. and up	22 0	...	—
Pipe in coils	22 10 0	...	—
Soil pipe	25 10 0	...	—
Compo pipe	25 10 0	...	—
ZINC—Sheet—	In casks of 10 cwt.		
Vielle Montagne	33 15 0	...	—
Silesian	33 10 0	...	—
Zinc, in bundles, 1s. per cwt. extra.			
COPPER—			
Strong Sheet per lb.	0 1 1	...	—
Thin " "	0 1 2	...	—
Copper nails "	0 1 0	...	—
Copper wire "	0 1 0	...	—
BRASS—			
Strong Sheet "	0 1 0	...	—
Thin "	0 1 1	...	—
TIN—English Ingots "	0 2 3	...	—
SOLDER—Plumbers' "	0 0 11	...	—
Tinmen's "	0 1 2½	...	—
Blowpipe "	0 1 4½	..	—

ENGLISH SHEET GLASS IN CRATES OF STOCK SIZES.*

Per Ft., Delivered.			
15 oz. thirds	2½d.	26 oz. fourths	4d.
" fourths	2d.	32 oz. thirds	5½d.
21 oz. thirds	3½d.	" fourths	4½d.
" fourths	3d.	Fluted Sheet, 15 oz.	3d.
26 oz. thirds	4½d.	" 21 oz.	4d.

ENGLISH ROLLED PLATE IN CRATES OF STOCK SIZES.*

Per Ft., Delivered.			
⅛ Rolled plate	2½d.	Figured Rolled, Oxford Rolled, Oceanic, Arctic, Muffled, and Rolled Cathedral, white	3½d.
¼ Rough rolled and rough cast plate	2½d.	Ditto, tinted	5d.
⅜ Rough rolled and rough cast plate	3d.		

* Not less than two crates.

OILS, &c.		£ s. d.
Raw Linseed Oil in pipes	per gallon	0 2 9
" " " in barrels	"	0 2 10
" " " in drums	"	0 2 11
Boiled " " in barrels	"	0 2 11
" " " in drums	"	0 3 2
Turpentine in barrels	"	0 2 7
" in drums	"	0 2 9
Genuine Ground English White Lead,	per ton	31 0 0
Red Lead, Dry	"	27 0 0
Best Linseed Oil Putty	per cwt.	0 10 6
Stockholm Tar	per barrel	1 12 0

VARNISHES, &c.	Per gallon. £ s. d.
Fine Pale Oak Varnish	0 8 0
Pale Copal Oak	0 10 6
Superfine Pale Elastic Oak	0 12 6
Fine Extra Hard Church Oak	0 10 0
Superfine Hard-drying Oak, for seats of Churches	0 14 6
Fine Elastic Carriage	0 12 0
Superfine Pale Elastic Carriage	0 16 0
Fine Pale Maple	0 10 0
Finest Pale Durable Copal	0 18 0
Extra Pale French Oil	1 1 0
Eggshell Flating Varnish	0 18 0
White Pale Enamel	1 4 0
Extra Pale Paper	0 12 0
Best Japan Gold Size	0 10 6
Best Black Japan	0 16 0
Oak and Mahogany Stain	0 9 0
Brunswick Black	0 8 0
Berlin Black	0 16 0
Knotting	0 10 9
French and Brush Polish	0 10 6

TO CORRESPONDENTS.

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* *Denotes accepted.* † *Denotes provisionally accepted.*

BLACKBURN.—For erection of the first portion of the new Evangelical Protestant Church, Fecitt Brow. Mr. F. J. Parkinson, architect, 9, Richmond-terrace, Blackburn. Quantities by architect:—

Marshall & Tinning, Bold-street, Blackburn*	£598		

BUCKNALL.—For erection of a relief-station in Wemington-road, for the Stoke-upon-Trent Board of Guardians. Mr. A. R. Piercy, architect, Union Offices, Stoke-upon-Trent:—

T. Godwin	£847 0	T. Cooper	£745 10
A. E. Chatfield	820 0	Ball & Robinson	700 0
B. James	782 0	W. Thomas & Son, 62, Festing-street, Hanley*	685 0
Meiklejohn & Son	780 0		
C. Cornes & Son	775 0		

CAERPHILLY.—For four pairs of semi-detached houses on the Fairfield Estate, Caerphilly, for the Caerphilly Co-operative Garden Village Society, Ltd. Mr. W. H. Wright, surveyor:—

		Per House.
D. Bryan	£550 0 0‡	£275 0 0
Cardiff Decorating & Building Co., Ltd.	507 0 0‡	253 10 0
F. Bristow	1,944 19 4§	243 2 5
J. Lewis & Sons	460 0 0‡	230 0 0
Hamilton & Millard	1,840 0 0§	230 0 0
P. Davies & Lewis	1,785 0 0§	223 0 0
T. Rossiter, jun., Bron Llys, Caerphilly*	—	200 0 0

‡ Per pair. § Complete.

DAVENTRY.—For erection of a public elementary school, for the Northampton County Education Committee. Messrs. Talbot, Brown, & Fisher, architects, Wellingborough:—

Holland & Marks	£4,112 14 9	W. Corah & Son	£3,375 0 0
T. Swindall	3,564 0 0	W. Heap	3,334 0 0
O. P. Drever	3,525 0 0	W. Hawtin	3,279 0 0
Hacksley Bros.	3,487 0 0	E. Green	3,265 0 0
E. Brown & Son, Ltd	3,447 8 9	T. Higgs	3,260 0 0
R. Marriott	3,410 0 0	W. H. Webster	3,145 0 0
		T. Adams, Daventry‡	3,086 0 0

‡ Accepted subject to the approval of the Local Government Board and the omission of one classroom.

HANLEY.—For erection of a relief-station at the rear of 97, Moston-street, for the Stoke-upon-Trent Board of Guardians. Mr. A. R. Piercy, architect, Union Offices, Stoke-upon-Trent:—

C. Smith & Son	£600	Ball & Robinson	£109
T. Godwin	136	W. Thomas & Son, 62, Festing-street, Hanley*	98
H. Eardley	135		
A. E. Chatfield	116		
J. Roberts	115		

HENDON.—For the erection of a cinematograph theatre for the Hendon Cinema Company, Ltd., at corner of Brent-street and Bell-lane, Hendon. Mr. Percy A. Boulting, architect, 11, Pleydell-avenue, Chiswick, W.:—

W. T. Batchelor & Sons	£1,075
H. & E. Lea	988
R. N. Marrable, Leytonstone*	955

LONDON.—For rebuilding the Middle-row School, Kensington, for the London County Council:—

Leslie & Co., Ltd.	£24,529	G. E. Wallis & Sons, Ltd.	£21,944
C. F. Kearley	23,498	Patman & Fotheringham, Ltd.	21,923
F. & H. F. Higgs	23,235	McCormick & Sons, Ltd.	21,332
W. Johnson & Co., Ltd.	23,086	E. Lawrance & Sons, Ltd.	21,300
J. & C. Bowyer, Ltd.	22,936		
G. Godson & Sons	22,730		

LONDON.—For constructing a main outfall sewer for the eleventh asylum on the Horton Estate and for an approach road to the asylum, for the London County Council:—

Construction of Main Outfall Sewer.

Airds, Ltd.	£5,846	S. Kavanagh & Co.	£3,977
D. R. Paterson	4,350	J. Mowlem & Co., Ltd., Westminster*	3,283
J. Dickson	4,160		

Formation of Approach Road.

J. Mowlem & Co., Ltd	£1,193	J. Dickson	£1,034
H. Boyer	1,075	S. Kavanagh & Co., Surbiton*	977

LONDON.—For heating installation at the Ricardo-street School, Poplar, for the London County Council:—

J. Grey, Ltd.	£1,080 0 0
J. C. Christie	875 0 0
B. Harlow & Son	870 16 0
Brightside Foundry & Engineering Co., Ltd.	853 0 0
Hayward Bros. & Eckstein, Ltd.	845 17 6
A. Macintosh & Sons, Ltd.	788 5 6

LONDON.—For enlarging playground at the Randall-place School, Greenwich, for the London County Council:—

Lister & Co.	£508 0	H. Bragg & Sons, Ltd.	£469 0
Galbraith Bros., Ltd.	586 0	G. Parker & Sons	465 0
J. Appleby & Sons	487 0	W. V. Goad	456 0
T. W. Heath & Son	480 0	W. Bailey	449 10
		E. Mills	437 0

LONDON.—For the erection of a bandstand shelter in Springfield Park, for the London County Council:—

H. Newell	£377 0	J. C. Mather	£323 0
R. Harding & Son	375 10	Marchant, Hirst, & Co.	293 0
G. Godson & Sons	356 0		

PORTLAND.—For erection of a new elementary school. Mr. E. J. Brett, architect, Wimborne:—

Jesty & Baker, Portland, Dorset*	£3,949

LONDON.—For adaptation of part of mansion at Golder's Hill as a residence, for the London County Council:—

G. Godson & Sons	£297 0	Marchant, Hirst, & Co.	£245 10
Rowley Bros.	285 0	J. Grover & Son	243 12
J. C. Mather	270 0	Stevens & Sons	237 10

WINCHMORE HILL (Middlesex).—For the erection of a new Council school, for the County Council of Middlesex. Mr. H. G. Crothall, Architect to the Education Committee:—

J. C. Tennant & Co.	£12,219	Fitch & Cox	£10,425
A. Porter	10,772	W. J. Dickens	10,400
H. Knight & Son	10,554	W. Lawrence & Son	10,342
G. Neal	10,490	Fairhead & Son	10,235
Rowley Bros.	10,436	A. Monk	10,036
Brand, Pettit, & Co.	10,452	Mattock Bros., Wood Green‡	9,987
W. Lacey	10,448		

‡ Recommended for acceptance.

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